

digit

March 2007

Fast Track to

FREWARE

Developer Tools

Games

Multimedia

SystemTools

Internet Applications

Essentials

Commute Computing

Productivity Tools

Fun Stuff

Desktop Enhancements

Free Entertainment Online



YOUR HANDY GUIDE TO EVERYDAY TECHNOLOGY

Fast Track to Freeware

By Team Digit



Almost everything we speak about here, we've provided on our CD/DVD for this month.

Credits

The People Behind This Book

EDITORIAL

Deepak Ajwani Editor

Robert Sovereign-Smith Writer, Copy Editor

Ram Mohan Rao Copy Editor

Nimish Chandiramani Writer, Copy Editor

Karmanya Aggarwal Writer

Abey John Writer

Srikanth R Writer

Prakash Ballakoor Writer

DESIGN AND LAYOUT

Shivshankar Pillai, Vijay Padaya Layout Designers

Sivalal S Layout and Cover Design

Harsho Mohan Chattoraj Illustrator

© Jasubhai Digital Media

Published by Maulik Jasubhai on behalf of Jasubhai Digital Media. No part of this book may be reproduced, stored in a retrieval system or transmitted in any form or by any means without the prior written permission of the publisher.

March 2007

Free with Digit. Not to be sold separately. If you have paid separately for this book, please e-mail the editor at editor@thinkdigit.com along with details of location of purchase, for appropriate action.

No Strings Attached

This little guide is indispensable, even though we're saying it ourselves! We simply must, because what we've put together here is a collection of freeware in all the categories of computer usage that matter, from an office suite to prank software you can use on a friend. It's all there.

Some amongst us have gone bad and prefer to pirate stuff, which we don't like. We like our software either paid or free—and interestingly, there's free stuff for almost everything you'd need to accomplish.

Covered here are system tools, which affect every aspect of your computer; multimedia tools to play and manipulate your media files; software you'd use when connected to the Internet; applications for your mobile phone; tools to increase your productivity, whether at work or at home; desktop enhancements and such; and developer tools. We've also thrown in a few free games, and a guide to where you can find entertainment online.

Like we hinted at, the best thing about this guide is that you'll want to install almost everything—unless you're a pirate. Except for the chapter on “fun” software, every software we've covered here will be useful to most people.

It's not true in the software world that the best things come free, and we naturally have to admit that some freeware don't perform as well as their paid counterparts do. But that's to be expected, and the beauty of it, in fact, lies in the reverse assertion: some freeware are as good as their paid equivalents! Also, we should add that majority of what we present here is not “nagware,” software that prompts you to buy the full version. We've made a conscious effort to keep much of the nagware out, so you won't feel any guilt pangs.

We've made it simple for you—almost everything we speak about here, we've provided on our CD/DVD for this month, and some more—so you won't need to download a thing. As you use these software, don't forget to thank all those developers out there—if you can't trace them and send them a postcard, a silent prayer of thanks will do!

CONTENTS

Chapter 1	Developer Tools	9
1.1	Integrated Development Environments	10
1.2	Other Tools	18
Chapter 2	Games	21
2.1	Waršow	22
2.2	KLUELESS	24
2.3	Nexuiz	26
2.4	Ac!dbomb	27
2.5	Area 2048	29
2.6	Neo Sonic Universe	31
Chapter 3	Multimedia	33
Chapter 4	System Tools	51
4.1	Clipboard Utilities	52
4.2	Windows Explorer Enhancements	53
4.3	Desktop Search Utilities	55
4.4	Privacy Tools	59
4.5	Anti-Spyware	60
4.6	File Recovery Tools	62
4.7	Partition Tools	64
4.8	Firewalls	65
4.9	Hardware Monitors	67
4.10	RAM Optimisers	68
4.11	Hard Disk Optimisers	68
4.12	An Encryption Utility	69
4.13	A Display Optimiser	70
4.14	Process Explorer	71
4.15	A System Tweaker: Fresh UI	72
Chapter 5	Internet Applications	73
5.1	Browsers	74
5.2	Download Managers	80

5.3	Internet Optimisers	82
5.4	Bandwidth Monitors	85
5.5	Offline Browsers	86
5.6	E-mail Clients	87
5.7	IM Clients	90
5.8	Anti-spam Applications	92
Chapter 6	Essentials	95
6.1	Opera 9.1	96
6.2	VLC Media Player	100
6.3	IrfanView	102
6.4	K-Lite Mega Codec Pack	104
6.5	Avast! Home Edition 4.7	105
6.6	Spybot Search & Destroy 1.4	107
6.7	ZoneAlarm	109
6.8	WinRAR	112
6.9	Winamp 5.32	116
6.10	Foxit Reader 2.0 Build 1316	117
Chapter 7	Commute Computing	119
7.1	Mobile Managers	120
7.2	Applications	129
7.3.	Games	134
Chapter 8	Productivity Tools	141
Chapter 9	Fun Stuff	157
Chapter 10	Desktop Enhancements	173
10.1	Electronic Post-it Notes	174
10.2	Program Launchers	175
10.3	Virtual Desktops	176
10.4	Miscellaneous Applications	178
Chapter 11	Free Entertainment Online	181
11.1	Tools of the Trade	182
11.2	Copyright And Piracy	183
11.3	Content Sites	183

Developer Tools



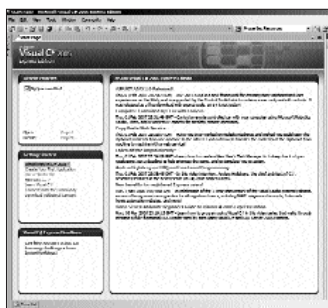
Got that programming itch? You couldn't have had it at a better time. Bar a few, most popular Integrated Development Environments (IDEs)—including Microsoft's Visual Studio—have their own free versions. The Community wave is upon us, and software vendors are always looking to get the regular user into software development. There are also a bunch of tools to create your own installers and integrate with SourceForge (if you're developing an open source project) as well. All you need is the talent!

1.1 Integrated Development Environments

If you're building applications on complex platforms like C++, Java or .net, you *could* just use Notepad, but to get your work done faster, you'll need an IDE.

1.1.1 Microsoft Visual Studio Express Editions

In the spirit of encouraging budding developers, Microsoft now releases its immensely powerful Visual Studio IDE free of cost as Visual Studio Express Editions, with the difference that instead of one suite for all platforms, you have to download a separate Express Edition for each language you want to use. This month, you'll find Visual C# Express Edition (we'll call it VCS now) on our DVD.



Nothing beats VCS if you're a .net programmer

If you're new to C#, you couldn't ask for anything more. From the "starter kit" to the extensive documentation online and IntelliSense—the code-completion engine—you'll rarely, if ever, find yourself stuck in a bind. The default install comes with two starter kits—Screensaver and Movie Collection. They're fully-functional as is, so you can study the code for your own reference—it's very well documented—or modify it to create your own customised application. Let's mess with the Screensaver starter kit, for instance.



Fiddle with the starter applications to see what you can create

The following assumes you have some basic knowledge of C#.

Modifying Your Screensaver

Let's get started with a simple hack: changing the default images in the screensaver. In VCS's Start page, click on Create (or **File > New > Project**) and select the ScreenSaver starter kit. You'll see the project's documentation page, which tells you how to use the project, get to the screensaver's options and so on. We recommend giving this a good read—it also tells you which code file contains what and how the project itself is structured.

The first thing you need to do is add (or remove) images in the project's resources. In the Solution Explorer, expand Properties and double-click on Resources.resx to modify it. You'll see a table with DefaultRSSText—ignore this for now. On the top left, you'll find a button labelled Strings—click on the arrow next to it and select Images. This is where you can remove the two default images; use the Add Resource button and choose Add Existing File to add your own images.

Tip

To see all the files in your project's directory, use the Show All Files button in the Solution Explorer—it's the second one from the left



The graphical way to edit your project's resources. Resources.resx is actually just an XML file that points to the files—be they documents, icons or images

Now that you've changed the default images, you need to go change the code that calls it. Double-click on ScreenSaverForm.cs. You're first taken to a blank Windows form—just right-click on this and select View Code (you can do the same from the Solution Explorer itself, instead of bothering with this). Go to the definition of LoadDefaultBackgroundImages()—this is the function that is called if you haven't selected an image folder in the screensaver

options. You'll see this code, which adds images from the project's resources to the list of default images:

```
backgroundImages.Add(Properties.Resources.SSaverBackground);
```

Replace “SSaverBackground” with the name of your image—use one such line for each of your images. *Voila!*

Obviously, there's a lot more you can do—including adding support for multiple RSS Feeds, but the procedure is somewhat lengthy, and beyond the scope of this *Fast Track*.

1.1.2 #develop

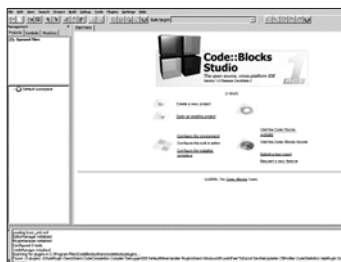
The open source alternative to VCS, #develop is a near-clone of Microsoft's IDE, so much so that it's entirely possible to mistake it for the original. The most obvious differences lie in the platforms you can develop for—in addition to the standard Windows and Console applications, you can also develop for Mono—the .net environment for Linux. You can also build modules to enhance #develop itself. It's also lighter on system resources than VCS, so you might want to consider it if you have a slower machine.



#develop is almost identical to the older version of Visual C#

1.1.3 Code::Blocks

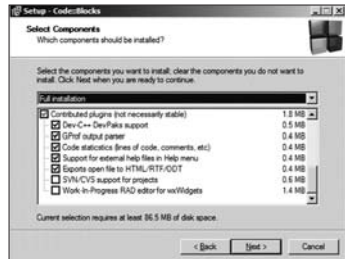
Licensed under the GPL, Code::Blocks is a C++ IDE that lets you create applications on a whole slew of platforms, including OpenGL and GTK (the GIMP Toolkit). It seems to encourage open source and cross-platform development, letting you develop applications using Qt and



Use Code::Blocks if you want to develop cross-platform applications

wxWidgets, apart from the GTK—you'll just need the respective toolkits installed to start working. You can also integrate with Subversion and CVS—if you intend to publish your project on Sourceforge.net. You need to remember to select the option when you're installing, though—it isn't by default. The option is recommended regardless, to help track the progress of your project. You'll need Subversion (subversion.tigris.org) installed to use this.

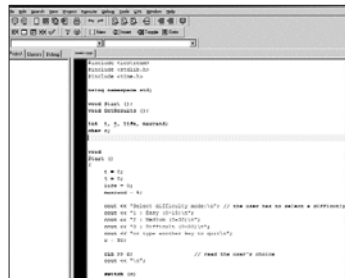
When you're writing long programs, the code-collapse function should come handy—most IDEs come with this feature. It lets you collapse functions and other such blocks of code into a single line, bringing some sanity to the document. Code completion (where you can use the [Ctrl] + [Spacebar] shortcut if you're confused about a function name or letter case) is a little finicky, and a lot of users have complained about it on the open forums. It's also clearly not as elegant as that of Microsoft Visual Studio, and so may present more of a challenge to beginners. Overall, if you've got some experience, and want to develop cross-platform applications rather than Windows native, Code::Blocks is the one for you.



Remember to select SVN/CVS support to enable version control over your project

1.1.4 Bloodshed Dev-C++

It's been freeware for years, and now Bloodshed Dev has gone open source as well. On your first run, you will be asked whether you want to enable a feature which reads header files and classes to give you easy access to functions—enable this, because it's a vital part of getting code completion to work well for you.



No blood involved in developing C++ applications with Bloodshed Dev

Unlike Code::Blocks, Dev-C++ doesn't let you work on multiple projects at once—a sore point if you're developing a Windows application and a DLL at the same time, for instance. Code completion, however, is much more satisfactory, as is the simple and elegant interface. There's support for the Concurrent Versioning System (CVS), so you can integrate your projects with Sourceforge.net and other open source project hosts. Unfortunately, support for Subversion—which is slowly replacing CVS as the de facto versioning system—is absent.

Dev-C++ has the standard syntax highlighting function, but you should change the colour scheme to make it easier to tell the difference between a reserved word and other text. By default, the only way to tell is that reserved words are bold. Change the colours in **Tools > Editor Options > Syntax**. You're presented with a panel full of sample code; just click on the parts whose colours you want to customise, and choose your colour—all ridiculously simple.

The current beta build doesn't have any help in the help files—not enough to matter, anyway—so you'll need to find answers on the user forums: www.bloodshed.net/forum/index.html.



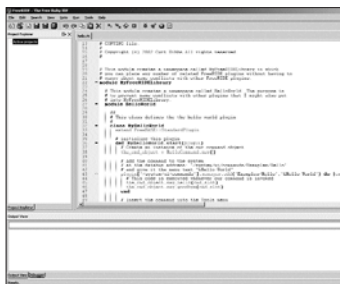
Bloodshed Dev-C++ is extremely customisable and also includes a shortcut editor



Make sure you colour-code your syntax appropriately before starting off

1.1.5 FreeRIDE

The new programming language, Ruby, is all the rage these days—and it's quite easy to learn, too. Unfortunately, good IDEs for Ruby are hard to come by, but FreeRIDE aims to change all that. It's written in Ruby itself, so is portable across nearly all operating systems, but it also means that it will take longer to start up than native applications. FreeRIDE comes bundled with the Ruby Installer we've given this month on the CD/DVD, so you don't have to worry about installing the Ruby Interpreter separately.



FreeRIDE is the IDE of choice for Ruby developers

The project is still in development, and isn't very newbie-friendly—you'll need respectable command over Ruby to get to grips with it. Still, it's better than Notepad, and with the online documentation, you can be well on your way to learning Ruby with few hiccups.

You'll find the Project Explorer and Source View panes on the left—the latter is especially useful: it shows you your code properly organised into Modules, Classes and Functions. Overall, FreeRIDE gives you just a little more than the fundamentals—more advanced features will take time—but it's better than the other options you have for Ruby development.

1.1.6 PHP Designer 2007 Personal Edition

The name may say PHP, but PHP Designer is a good bit more. It supports PHP files, HTML, CSS, XML, JavaScript, VBScript, nearly all variations of SQL, Perl, Java, Ruby, Python and C# (whew)—



PHP Designer is more than just PHP

though PHP remains its forte. It's got all the features you want in a good editor—syntax colours, a Code Inspector, debugger and so on. It also supports CVS and Subversion, so publishing your project on such version control systems isn't an issue either.

Remember that PHP is an interpreted language and doesn't require a compiler—if you're using PHP Designer for Java or C# files, the best you can get out of it is a respectable editor for your code—the absence of a compiler makes it a less desirable tool when it comes to these languages. It handles PHP quite well, though when we opened source code from the Joomla CMS, it couldn't auto-detect a couple of essential files that were in the same folder as the open document!

Another weird thing is that despite supporting HTML and XML, tags aren't automatically closed—if you start a tag called `<head>`, for example, it should automatically create a closing `</head>`. You'll find this functionality in a lot of editors, and we were disappointed with its absence. In the big picture, you don't want to use this for anything other than PHP, for otherwise it's just another text editor.

1.1.7 NetBeans IDE

Previously overshadowed by Eclipse (no pun intended), the NetBeans IDE for Java has finally matured into a product that seems to hold its own in the competition. It includes an in-built XML editor and supports the development of AJAX-based applications as well.



NetBeans is slowly gaining ground in the Java IDE market

Quite the space-saver, this.

Developing Windows GUI interfaces with NetBeans was a breeze—practically as simple as doing the same in Visual Studio.

Projects are organised in the pane on the right, and it shows you all the details you need—classes, functions and even variables. The autocomplete feature is a little slow to respond, but when it does, you get a fairly lucid description of everything in the list—a big reason for beginners to give it a go. CVS support is default, and you can get Subversion support by downloading a plugin.

Tip

To create blocks of code that you can expand and collapse at will, mark off regions thusly:

```
// <editor-fold defaultstate="collapsed" desc="My Code Block">
{put your code here}
// </editor-fold>
```

The default install is enough for your basic Java development needs, but you can download and install additional modules depending on your requirements—including the C/C++ pack, if you like the IDE enough and want to develop C++ applications in it as well. Other packs you can install:



NetBeans' autocomplete feature is quite informative

Visual Web Pack

The Visual Web Pack contains all you need to create Web applications easily, including a visual query editor (reminiscent of the one you'll find in Visual Studio 2005) to build complex database queries easily. It also gives you a bunch of JavaServer components with AJAX support.

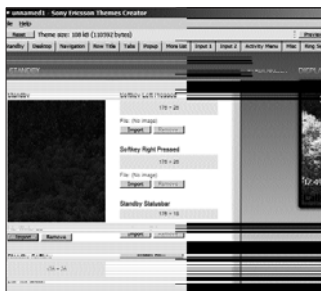
Mobility Pack

Quite suggestive by name itself, the NetBeans Mobility Pack enables you to develop mobile applications based on either the MIDP (Mobile Information Device Profile) or CLDC (Connected Limited Device Configuration) platforms. It also features a device emulator that sports phones from most vendors, and a visual GUI editor for your applications.

1.2 Other Tools

1.2.1 Sony Ericsson Themes Creator

There are probably a million themes you can get for your Sony Ericsson phone, but nothing makes a statement like your own unique theme. Sony Ericsson releases its Theme Creator free of cost, which in its current version lets you create themes for nearly all Sony Ericsson phones—from the now ancient T68i to the new W950i. Using it is embarrassingly simple too—all you need to do is make a set of images according to the dimensions it asks for!



Creating themes for your Sony Ericsson phone is ridiculously easy

Honestly, there's nothing we can write about this software that you can't find out just by looking at it—it's *that* easy to use!

1.2.2 Microsoft XNA Game Studio Express

Again, with the spirit of encouraging community development, Microsoft has released XNA Game Studio Express, with which you can create games for the PC as well as the Xbox 360. The idea behind XNA is that game developers should spend less time worrying about implementing their ideas, and more on the ideas themselves. Don't fool yourself into believing this will be as easy as tools like FPS Creator—you do need some serious programming skills. XNA installs as an add-on to Visual C# Express, and you'll need to be comfortable with C# programming before you start developing any games. To get you start-

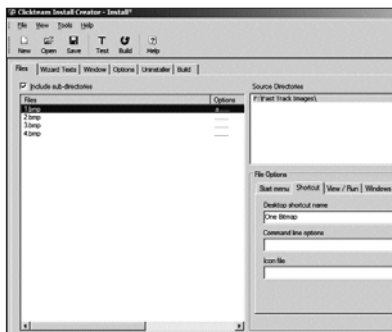


Not only do you get to learn the coding, this “Evolved” version of *Spacewar!* is also a whole lot of fun!

ed, XNA gives you the Spacewar starter kits for both the PC and 360—they're well documented, and you can tweak the game as much as you please.

1.2.3 Clickteam Install Creator

You've taken the pains to build the application, but you can't expect users to take the pains of extracting your program files and creating shortcuts, can you? Clickteam's Install Creator is a simple tool you can use to package your application for distribution on the Internet. Think of it as a self-extracting archive on steroids. There's no functionality to register DLLs, and it doesn't integrate with projects written in any particular IDE.



Install creator is as simple as “Select files, build!”

However, it does meet the requirements of most developers, and the only price you have to pay is the ad for Clickteam that appears at the end of the install.

Nearly every part of your Install Wizard is customisable. You can edit the text for each step under the Wizard tab, and use the Edit button to customise colours and fonts. The whole thing is a no-brainer to use, so we won't waste words here.

1.2.4 CyberInstaller Suite 2006

Another program for creating installation packages, CyberInstaller Suite (CIS) is considerably more complex and feature-rich than Install Creator. The condition for using the free version of CIS is that installation packages you build with it can only be distributed free of cost—the person installing your program is informed about this in big capital letters, so you definitely can't sell software unless you pay for the professional version. Sound

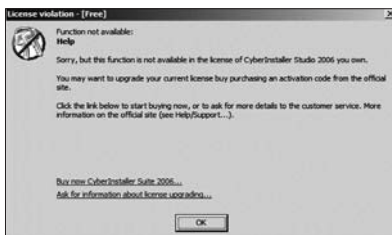
familiar? If you've installed the *Digit Software Archive*, it should—this is what we use to build the install package.

After starting up CIS, you can choose to create install packages from projects built in Visual Basic, Delphi or .net, among others. CIS will automatically analyse the program or project for dependencies, and you can bundle these with the installer if you choose. If you select .net, for instance, you can even bundle the .net framework with the program itself—it does add a 25 MB overhead to the package's size, but you can't beat the idea for sheer convenience.

One disappointing thing about CIS is the limited resources you have to customise the install GUI—some of the English is appalling, and we'd have liked a chance to edit it. The customisability you get in the rest of the application, however, more than makes up. You can bundle applications to run before your application's setup, edit registry entries, change file type associations—if you want all JPEG images to open with your application, for instance—set minimum system requirements, and even generate serial codes for your software.



Install creator is as simple as "Select files, build!"



One ridiculous thing about CIS is that you need to upgrade your license to use *Help!*

Games



To a lot of people, gaming is one of the most important uses of a personal computer. Gaming cafés are springing up all across India. So what do you do when you want to play for free? Well, all the following games are fun, and they're free as well—not to mention very addictive!

2.1 Waršow

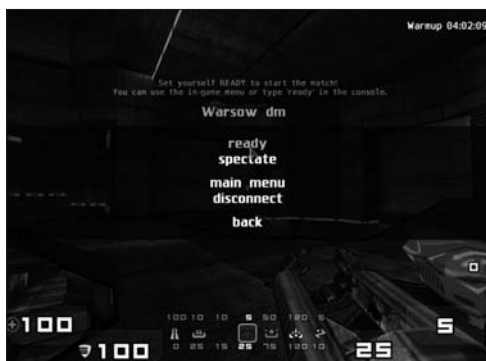
(www.warsow.net)

Waršow is a first person shooter designed for online play. It works on a 3D Open GL game engine based on QFusion (an enhanced version of the *Quake II* game engine). The game is available for Windows and Linux, and it is a short download—a mere 76.8 MB.

Once you've installed the program, joining a game is kind of tedious, as first you have to select either "join game" or "start server" from the main menu



The main menu in Warsow



After selecting "join" select "ready"

and then wait for the map loads. Then, if this is the first time you're playing the game, it expects you to figure that first you have to go to the in-game menu and select Join, after which you have to select Ready. We didn't really play with too many people, but the majority of the people on are quite friendly with newbies, and will play around just letting you get the hang of the game before you start playing competitively.

There aren't any glaring mistakes in the game, though the graphics are kind of buggy; also, on our system, there was a time difference between when we pressed the trigger and the weapon actually firing. The overall experience is quite satisfying, though, especially if you like blowing up people with flame-throwers / grenade launchers, since the game has a rather small arsenal of weapons—and none of the guns are as nice as those in *Quake* or *Unreal Tournament*.

We'd suggest you start playing with some bots first so that you can get some experience before going out and challenging another player. You can set the bots' difficulty by entering commands at the console, which can be accessed during a game. To play with bots, follow the instructions below:

- Start War\$ow
- In the main menu, select "start server"
- A list of options will appear; set the number of players to 1 (to ensure that no-one enters your game and starts killing you)
- Select your map and the number of bots you would like to face. To set the skill levels of the bots, you can type `sv_skilllevel <0/1/2>` at the console, 0 being easy, 1 being normal and 2 being hard.
- Select Begin to start the game
- Once you're in the game, press [Esc] and select Join
- Press [Esc] again and select Ready, or press [~] to open the console and type in "ready"

You should check out the forums on the Web site; the community is quite friendly, and you can find a lot of problems that you may have already been addressed. The forum is at www.war-sow.net/forum/viewforum.php?id=20

A couple of interesting features are trick jumping and the dash feature. Trick jumping is quite similar to trick jumping in *Quake III*; you have many different types of trick jumps from jumping continuously to maintain speed to jumping away from a wall or dodging a shot. Dash is a feature that allows you to run forward at

a much faster speed than regularly; combining dash with a movement key gives a quick jump in the direction of the key. This is quite useful to dodge shots and grenades, not to mention to change direction very quickly without losing crucial speed.

We'd suggest you read the wiki; it can explain all the different types of guns, how to install the game, how to move about, and it also gives you the trick jumps. You might find that trick jumping at first sounds easier than it is, but you'll soon get used to it. You can access the wiki at www.warsow.net/wiki/index.php?title=Main_Page

For more info, visit www.warsow.net.

2.2 KLUELESS

Klueless is a puzzle game developed by the good people at IIM Indore. It consists of a number of Web pages, and you solve the puzzle on the first page, which takes you to the next, and so on. The puzzle initially emerged as a competition where the first person to crack the entire puzzle would win a prize. This was won by Paromita Deb Areng of IIM Kozhikode. Now the game has two versions—the one that came out in 2005 and the one that came out in 2006. The 2005 game had 29 levels. Don't get discouraged if you can't get past the first couple of levels, since everyone who has played the game has to use Google. In fact, some amount of Googling is even recommended by the IRIS team (the people who made the game). Just don't use spoilers (answers cracked by other people), as it removes the challenge from the game.

Though the 2005 version was just a bunch of riddles thrown together, the latest one is centred around an investigation by Sherlock Holmes involving the theft of a pink diamond, where the thief had challenged Sherlock Holmes to find him.

The game cannot be downloaded, but it can be played at

www.iimi-iris.com/iris/irising/klueLESS/ (for the 2005 version) or www.iimi-iris.com/iris-2006/irising/klueless/index.asp (for the 2006 version).

A couple of tips from the rules page:

- You want to look for clickable objects anywhere in the page except if there is a text box, provided the answer has to be typed in the box.
- Use Google wherever required; in fact, most levels require Googling
- Sometimes using [Ctrl] + [A] (especially in the 2005 version) helps
- In the 2005 version, try checking the source code of the Web page to get a hint or two
- Look carefully at the pictures but don't be bound by them
- If a username and password is needed to clear the level, the username and password can be found by cracking clues in the same level
- Sometimes, especially in the 2005 version, you need to change the URL of the Web page to advance. Especially in level 7—we were stuck on that one for days). More often than not, the change will be to the last part of the URL, that is, before the “.asp”. Like the word before “.asp” in the following link is “index”: <http://www.iimi-iris.com/iris-2006/irising/klueless/index.asp>
- All answers will be in lowercase

A warning: this game is highly addictive and leads to chronic hair pulling. If you don't get the answers, you get extremely frustrated.

If you clear both these games, check out NOTPRON at www.deathball.net/notpron. “The hardest riddle on the Internet,” NOTPRON was the game that actually inspired the creation of Klueless, has 139 levels, and has only been solved by 115 people (consider that the site has had 1,12,43,467 visitors since it was first created).

Note: It is recommended to use Internet Explorer to solve the riddles.

2.3 Nexuiz

(www.alientrap.org/nexuiz/index.php?module=downloads)
(<http://tinyurl.com/35bcqf>)

Nexuiz is a 3D Deathmatch game project similar to *Quake III Arena*. It was first created by a team of developers called Alientrap, and is available on Linux, Windows, and Mac. It runs on the Darkplaces game engine—a modified version of the *Quake 1* engine.

After downloading the game, you'll have to extract the contents in the .zip file and then simply click on the *Nexuiz* icon to start playing. There is no installation needed.

The game is all about the basics of gaming—gameplay, game-play and even more gameplay! It has nine weapons and 24 official maps, but an additional download of 35 maps gives the game more variety. Apart from the maps available on the Web site, several players on the forum have made custom maps and have put them up for download.

Our favourite weapon is the rocket launcher—don't you get that nice warm feeling when you blow an opponent to pieces using a BFG? Something really cool is that the game has a grappling hook, which players can use to pull themselves towards or up walls, allowing you to pull off some really cool moves or get to usually unapproachable areas.

The game is primarily multiplayer, but it offers a full-fledged single-player mode where the player goes through several maps while playing against bots.

We noticed that if you're playing against bots, they constantly try to kill each other, so grab a rocket launcher and stay close. As soon as one of the bots kills the other, finish him off—you can grab a few quick kills this way.

The game modes are pretty much standard—you have the Deathmatch, the Capture the Flag, Last Person Standing, etc. etc. The game's options of having visual effects which can be turned off for lower-end systems and revved up for higher-end systems make it more flexible. Even with everything turned low, the game doesn't look half bad.

Nexuiz is one of the best free first person shooters out there, and has a huge online community. Check out the site at www.alientrap.org/nexuiz/ for the forums and FAQ, which will help out a lot. The forums have a large number of members who go all out to help out the newer members on everything from tips and tricks to running the game.

One of the best parts of Nexuiz is that you can laser jump—this is similar to using the rocket launcher to jump in *Quake II* and *III*; only thing is, it takes longer to perfect. The only bad thing we found was that it can sometimes get a little laggy in multiplayer. One of the best things we found was that you could change the server settings without even restarting the game; all it takes is a couple of clicks. So grab a couple of trigger-happy friends, an Internet connection, a copy of this game, and frag to your heart's content!

2.4 Ac!dbomb

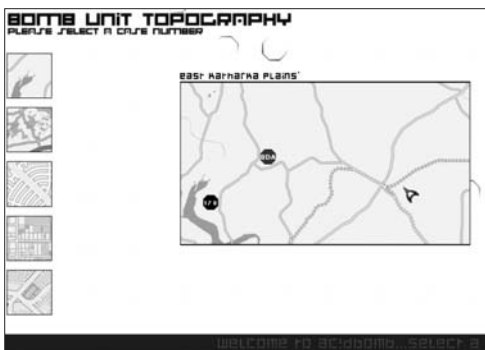
(www.vertigogaming.net)

This is one awesome game. In it, you're a bomb defusal expert for the Department of Homeland Security. You first learn how to play the game, and then are confronted with several types of increasingly difficult bombs, which you have to diffuse before they blow up. The game reminds us of *Minesweeper*. The different types of bombs and the obstacles you encounter add to the difficulty of the game, but the game really doesn't really need any more making difficult.

At the start of the game, the screen consists of a vertical line of white octagons which with the progression of the game become black octagons. To actually diffuse a bomb you must find the number of pistons hidden among the octagons. The total number of pistons and the number of pistons in the lane being covered by the SDUs (beams of light) is displayed. If you suspect there being a piston in a tile you must mark it with a “!” but can mark it with a “?” or “X” if in doubt. A



You will like the simple interface



A map in acidbomb

counter displays the number of “!”s put, so you can keep track and know if you have put too many.

What is clear after having played the game a little is the attention to detail. Since most bombs have a timer, if you run out of time, many cool things start to happen—at six seconds the screen wobbles and shakes, at three an extremely loud, irritating sound is heard, and at 0 the screen flashes white. If you have found the correct number of pistons in the right places, then you will have successfully defused the bomb, however if you haven't, you have to restart the level. If you are feeling overly confident about your

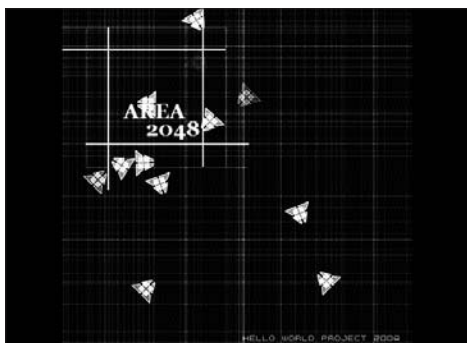
work you can always press [Enter] to leave only 10 seconds on the clock and wait for the “mission complete” sign to appear.

Tip: be careful not to press [Enter] while you’re diffusing the bomb, since it will leave you exasperated!

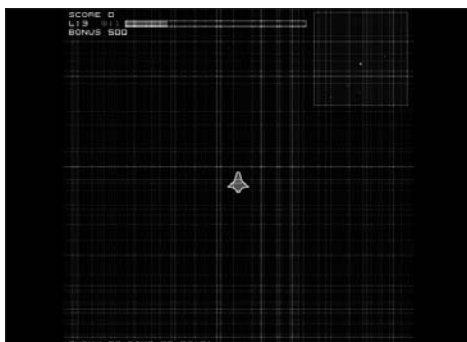
2.5 Area 2048

(www.gamehippo.com/download2/download2_2081.shtml)
(<http://tinyurl.com/37zbxxy>)

This is a Japanese shooter and is worth playing again and again. It reminds one of the old star defender games, in the days when gaming was all arcade-based and was pure gameplay. In Area 2048, you are put into a large area filled with enemy ships. Your goal is to destroy all the enemy ships in order to progress to the next level, or “scene.” To do this, you’re armed with rapid-fire lasers, and have a special attack if times get sticky. Your special attack makes the



Vector graphics—who cares



I know the graphics don't look great

screen zoom out as your ship begins spewing lasers like mad in the general direction your ship is pointing. At any time you aren't using this attack, it is recharging for its next use.

You can move your ship around using the arrow keys to change direction, and you can lock onto an enemy ship by pointing towards it and shooting for a second. This makes it easy to clear a room of weak enemies or attack a tough boss. After clearing a screen of enemies the ship suddenly gets a force field around it to prevent the leftover bullets roaming around the screen from destroying you.

The vector graphics don't look that great, but then the game is so addictive, its hard to stop playing, and after a while you don't notice the graphics at all. About the vector graphics: they are created using lines such that basic shapes can be created. For example, the ships you shoot are shaped like arrows, circles, stars, and other basic geometric shapes; even when you destroy an enemy it dissolves into a bunch of lines.

Unfortunately, there is no multiplayer compatibility on this game, so it's solo all the way. In addition, the game gets boring after a while—we mean you can only destroy a bunch of shapes for so long, right? So this game is recommended for those who've got an hour or two to kill. For a tip, we recommend flying to one side of the screen such that all your ships are opposite you and then fly the other way using your special attack as you go along. If you time it right you can get it at exactly the point at which the time for the special attack is at its maximum and you can take out all the enemies in the map in a single go!

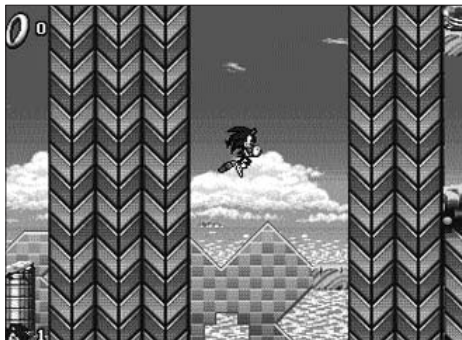
2.6 Neo Sonic Universe

(http://g1.acid-play.com/download/3796d67f/sonicthehedgehog_nsu.exe)

(<http://tinyurl.com/2p9apy>)

Neo Sonic Universe is one of the best *Sonic the Hedgehog* clones ever. This is also one of the most original-looking ones. Download the setup and after a quick installation you're ready to go. On launching the game, you get a small menu which among other things asks you whether you want to play in Battle or Adventure mode.

The Adventure mode is where you play as one of the characters navigating through the map, by rolling to destroy monsters and jumping from wall to wall, *Prince of Persia* style. You can choose to play as different characters during the game and the default character is Sonic the Hedgehog. To play as another character you must "save" that character—to play as Tails, you have to finish the game as Sonic first.



It's no Prince Of Persia..



...but death is just as painful! Noooooooo!

The Battle Mode has some really fun features to play versus the computer or another person, and features some nice moves unavailable in the adventure mode, like shooting balls of energy out at the opponent. In battle mode you have two bars at the corners of the screen, a health bar and an “energy” bar. The special attacks take a certain amount of energy from the bars; the bars do recharge over time but they tend to be a little slow, so conserve your energy.

Also, in battle mode, it is advisable to keep moving about the map so you don’t get plastered by the computer who is jumping all across the map like there’s no tomorrow; every once in a while a monster flies across the top of the screen dropping bombs on you. The game has good gameplay, but the graphics are nothing worth mentioning. Like most arcade games, there aren’t too many puzzles in the game—at most you have to get to a platform which unlocks a door.

All over the game you get weird, spring-type buttons which you activate by dropping upon; these rarely come alone, and you usually have to jump from one to another to get to a place. Also, if you have collected golden rings, then even if you bump into a monster you only get thrown around and lose all your rings, but if you bump into a monster without carrying any rings then you die and are teleported back to your last save point or the start of the level.

Overall, the game is nice for those who love arcade games and are bored of playing *Mario*.

Multimedia



Here we cover everything related to audio and video software. Well, almost. We talk about the latest versions of all the usual suspects such as Windows Media Player, iTunes, Winamp etc., and we also delve a bit deeper to bring to your notice some hidden gems that will fire up your audio / video experience.

GSpot Information Appliance v2.60 RC01

www.headbands.com/gspot

All compressed audio and video files (and that means almost all of them) use specific codecs to play their respective type of media. A really frustrating situation is when you have a movie or audio file that doesn't get recognised by your media player, instead giving you an "unknown file format" or "codec not found" error. The first step in troubleshooting the problem is identifying the required codec—and this is where GSpot comes in. Simply open the audio or video file in GSpot, and it will analyse it and tell you what codec it uses. You can then search the Web and download a compatible codec (free or paid).



GSpot: discover the codec

FLV Online Converter v0.5.1229

http://vixy.net/flv_converter

Have you ever watched a YouTube video that you would have loved to save to your computer, or taken around with you on your mobile phone, or stored in your iPod? Sites such as KeepVid.com and others only allow you to download the FLV (Flash Video) file, and you have to rely on other software to convert it into cell phone or iPod compatible formats. Vixy.net's FLV Online Converter changes all that. In a single step, the site will convert and download any online Flash video in any one of the four video formats: AVI (for Windows), MOV (for Mac), MP4 (for iPod), 3GP (for cell phones), or as MP3 audio for where the video portion is stripped off.

The service is pretty fast, and the output quality is comparable to the original. Just give the URL of a YouTube video, or for that matter, any page with an embedded Flash video (with the .FLV extension). The FLV converter service will scan the page for

the embedded video file and extract the video in one of the five specified formats.

For those of you legal eagles wondering about the legality of downloading from YouTube, the terms of service lets us off the hook. You can use the content for personal, non-commercial use, and “If you download or print a copy of the Content for personal use, you must retain all copyright and other proprietary notices contained therein.” So go ahead and download to your heart’s content! Just make sure you don’t edit the video to remove copyright and proprietary notices.

Finally, if you would rather not convert the FLV file, just download it using KeepVid.com and view it using any of FLV Player (on the CD/DVD), Riva FLV Encoder (mentioned later in this chapter), Media Player Classic (which comes bundled with the K-Lite Mega Codec Pack covered in the Essentials section), or VLC Media Player (also in the Essentials section).

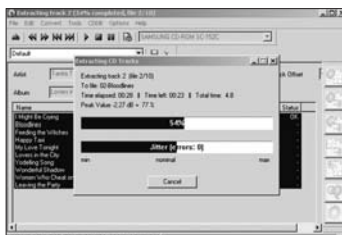


FLV Online Converter: do it all online, without the bother of conversion

CDex

<http://cdexos.sourceforge.net>

CDex is a free and open source audio CD ripper and encoder. That is, it can take audio files from CDs and store it on your hard disk in either the standard WAV audio file format, or compress it using any of the supported audio encoders. These include the Lame MP3 encoder, Internal MP2 encoder, APE lossless audio format, Ogg Vorbis encoder, The Windows MP3 encoder (Fraunhofer MP3 encoder), NTT VQF encoder, AAC encoder, and the Windows WMA8 encoder.



CDex: extract audio from CDs

The user interface is easily laid-out and intuitive, and will only take a few seconds to understand. Its feature set rivals that of many commercial CD rippers and includes advanced jitter correction, direct recording of multiple tracks, and retrieval of album and track information from the CD's track list if available, or from online sources saving you a ton of time—as you won't need to manually tag each of the songs.

Zamzar Beta

<http://zamzar.com>

If you've ever needed to convert an audio or video file from one format to another without needing to installing the requisite software, then Zamzar's online file conversion site is what you need. Supporting over 200 file formats including popular document, image, video, and audio formats, file conversion at Zamzar is a simple

The screenshot shows the Zamzar website's main interface. At the top, it says 'ZAMZAR' and 'Free online file conversion'. Below this is a large banner with two cartoon characters and the text 'Have you ever wanted to convert files without the need to download software?'. There's also a 'News' section mentioning a new page for helping friends. The main part of the interface is a four-step process: Step 1 (Select files to convert), Step 2 (Choose the format to convert to), Step 3 (Enter your email address), and Step 4 (Convert). Each step has a brief description and a button to proceed.

Zamzar: file Conversion on the go

four-step process. Select a file up to 100 MB in size; choose the format you want it to be converted to—note that Zamzar will automatically will narrow down your list of choices based on the file extension; enter your e-mail address; and click Convert. The file will be uploaded and converted, and an link sent to your e-mail from where you can download the converted file.

Be forewarned, though, that the link will only be valid for 24 hours after the mail has been sent. Depending on the size of the source file, the conversion process can take anything up to a few hours.

Audiograbber

www.audiograbber.com-us.net

Audiograbber is another audio ripper, but with a difference. In addition to all the standard features that you would expect from any CD

ripper, Audiograbber can also record from your old analogue cassette tapes and vinyl LP records. You will need to connect your cassette player's line-out (if it has one) or the headphone jack (if it doesn't have a line-out) to your computer's sound card (line-in). Audiograbber can then record from the line-in as WAV. Subsequently, use the



Audiograbber: digitise your cassette rack!

Riva FLV Encoder 2

www.rivavx.com/index.php?downloads&L=3

Flash video has become the *de facto* standard for video on the Web. This leaves video content authors with the necessity to encode their videos to the FLV format not only for easy distribution but also for embedding the videos on their Web sites. Riva's FLV Encoder 2 converts most of the common video formats including AVI, DV, MPEG, MOV, and WMV. It also includes a basic player to view the converted FLV file, and offers some very basic editing features.



Riva: Flash up the Web!

You can also use Media Player Classic (which comes bundled with the K-Lite Mega Codec Pack covered in the Essentials section) or VLC Media Player (covered in the Essentials chapter) to play FLV videos.

Audacity 1.2.6

<http://audacity.sourceforge.net>

If you've ever had aspirations to becoming an disc jockey or an

audio producer, Audacity is the place to start. Many a time, the sounds you record may not be exactly as would have liked it to sound. This is where audio editing comes in. Once an ivory tower reserved for select media professionals, audio editing has come of age. Now, all you need is the desire, imagination, and readiness to get into the intricacies of editing.

Suitable for the novice, the power amateur, as well as the budding professional, Audacity is a free, open source program with features that can give professional audio editing software a run for their money. Intuitively laid-out screens make Audacity a breeze to use. It supports live recordings,



Audacity—get the dance floor burning

ings, and like Audiograbber, can convert tapes and vinyl LP records into digital recordings or CDs. Cut, chop, slice, dice, mix, split, join, stretch, skewer, and much more with the full-featured audio editing controls. Make your *masala* mix and serve it hot to your audience!

Streamripper

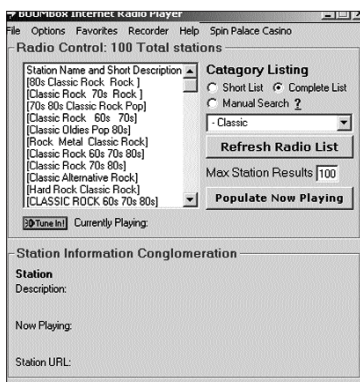
<http://streamripper.sourceforge.net>

For those of you hooked on Internet radio but still wishing you could save some of those great tracks that get streamed into your speakers, look no further than Streamripper. Another open source project at Sourceforge, Streamripper grabs the audio stream from Internet radio stations like ShoutCast and others. You can install it as a plugin to Winamp, or use the command-line version. At the download link is this disclaimer, however, which you should read and abide by: “We encourage you to determine whether this product or your intended use is legal. We do not encourage or condone the use of any software in violation of applicable laws.”

Boombox Online Radio Player 1

<http://tinyurl.com/254avs>

This little program gives you instant access to thousands of online radio stations across multiple genres. Select a particular genre or its sub-genre, specify the maximum number of radio stations you want the program to search for—the default is 100—and click the Refresh Radio List button to get a list of radio stations playing now.



Boombox: Internet radio at your fingertips

Boombox is a dedicated Internet radio streamer, but you will still need a compatible media player to listen to the stream. Open WMP, iTunes, or Winamp (or your favourite media player if it's something else) and in Boombox, double-click the radio station you want to hear. The selected radio station will be streamed through your media player. One small drawback: it will optionally ask you to install a casino program during the installation process. While not malware, just be careful when you click through the installation screens, and ensure that the option to install the casino program is not selected. By default the installation of the casino program is deselected; leave it at that unless you want to give the program a whirl.

iTunes

www.apple.com/itunes

iTunes is Apple's media player, the syncing tool for your iPod, the interface to the iTunes online store, as well as a versatile music jukebox. Unfortunately, non-availability of the iTunes Store in India cripples your ability to purchase music online and also prevents you from updating the album art of your music collection. However, if you have an iPod, you might be willing to live with these inconveniences for the ease of syncing all your songs and playlists.



The new iTunes 7 interface—an exciting new look. The iTunes interface has always looked good, though!

Like most jukeboxes, iTunes supports drag and drop playlist creation, automatic tracking of the most played songs, ripping and burning of CDs, and more.

However, iTunes is a resource-hungry beast, and also installs some services that start with Windows. So unless you have sufficient processing power and RAM, you might be better off looking at some of the other media players.

Windows Media Player 11

www.microsoft.com/windows/windowsmedia/default.mspx

If you haven't upgraded to Windows Media Player 11 (Windows XP and upwards only), now is the time. The all new, sleek and shiny interface gives it a polished look. The overhaul for this version is not just about aesthetics—usability is a primary consideration woven into the interface design. Keeping in mind the needs of both novice users as well as the audiophile, the focus is on a more visual way to navigate and use the various features. This enthusiasm for getting rid of textual menus can be a cause for confusion, especially for older users who are used to the standard menu structure. Especially jarring is the disappearance of standard file menus—don't worry, though, it's still there; you just need to right-click to reach it. Likewise, the browser-like

back and forward buttons will take some getting used to, but ultimately, it might be a better way to navigate.

WMP 11 comes packed with a ton of features and it all looks promising. CD ripping and burning with support for encoding in the standard formats plus some new ones: Windows Media Audio Pro and WAV (lossless). As with other players, there is a tighter integration with the Web both to online stores where you can buy music as well as searching for supporting information like album art. However, it still has a way to go before supporting something like the new personal streaming feature in Winamp.

Finally, something long overdue: instantaneous search. As you type, the selection narrows down based on the entered keywords. With personal digital music libraries now running into hundreds if not thousands of songs, this feature is not a moment too soon.

Audio fingerprinting—comparing and matching song information by comparing the waveform of the song in your library against a database—is a cool new feature, but it will need to mature before it becomes truly useful.

Winamp 5.32

www.winamp.com

The world's favourite MP3 player continues to churn out great stuff... well, mostly. It is increasingly becoming harder to distinguish between media players as almost all continue to “borrow” functionality and features from each other with each new release. That said, Winamp continues to lead the pack primarily with stellar audio performance. On the video front there are still a few kinks, and on low-spec machines it tends to stagger every few minutes, so you might be more comfortable watching video on another player.

Version 5.32 introduces two new beta features: the Dashboard and Winamp Remote. Dashboard is something like a home page, and is similar to Windows Media Player's “Media Guide” page. Purportedly there are some personalisation features, but it's

practical usefulness is questionable. Still, since it's in beta, we will need to wait to see how the functionality finally evolves. Winamp Remote, though, looks more promising. You will need to download an additional piece of



WinAmp—it really does whip the llama's a!**

software to set up your own personal streaming server. That is, somewhat like the integrated ShoutCAST radio service where you can listen to streams from other users, Winamp Remote allows you to stream your media library to other computers.

As with other media players, adding songs and videos to your library is a snap. With hundreds and thousands of skins to choose from, you can customise the look and feel to reflect your style and individuality. Browse the Skins section at the Winamp site, and while you're at it, check out the Plugins section as well. There are tons of options to choose from and customise how Winamp behaves. Also check out the Predixis Music Magic mixer—it goes through your music library and mixes and matches acoustically similar music. Again, like with the audio fingerprinting in Windows Media Player, this is more at the experimental stage.

RealPlayer 10.5

<http://tinyurl.com/2unc6v>

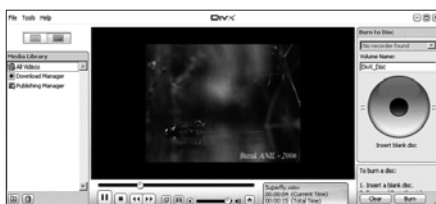
RealPlayer needs no introduction. This music jukebox and media browser offers every feature that other media players / jukeboxes in the same class do. There are also the standard ripping and burning features, as well as support for Internet radio. It's for this last feature that you might want to adopt RP—there are tons of stations available. A serious drawback is that RP is a resource hog. Additionally, it loads some files at startup, which eat into your RAM space. The real annoyance, though, is that even if you manually delete the registry startup entry, RealPlayer will re-insert it every time you start the player!

DivX

www.divx.com

DivX is one of the most popular video codecs in the world. Its main feature is its ability to compress lengthy video segments into small sizes

with relatively high quality. This feature is particularly useful in taking compressed backups of DVD videos. Note that we strongly caution against and do not condone the copying and distributing of copyrighted material.



DivX: watch what you want

Follow the Download DivX link on the homepage to get the DivX community codec, the DivX Player, and the DivX Web Player. The download also installs a content uploader for sharing videos on the DivX video sharing site—Stage6 (<http://stage6.divx.com>).

You also get 15-day trial versions of the DivX Pro Codec and DivX Converter. The converter is used to encode MPEG-2/DVD videos to DivX. For a free converter and DVD backup solution, check out the open source project DVDx. The project homepage is www.labdv.com/dvdx. You can download the software from the SourceForge site: <http://sourceforge.net/projects/dvdx>.

Free iPod Video Converter

Free DVD/WMA/RM to MP3 ripper

www.jodix.com

This site has a collection of freeware that converts video and audio content. The Free iPod Video Converter is a front-end for codecs that convert digital video content into iPod compatible format (MP4). It supports AVI, MPEG, VOB, and WMV, and is very easy to use besides being free. You can specify conversion parameters like video size and quality, set up batch conversion jobs, and set the program to automatically shut down the computer after completing all its tasks. Three other software downloads from this site enable you to rip MP3s from DVDs and convert WMA or RM (Real Media) files to MP3.

TVU Player

www.tvunetworks.com

Ever wanted to watch live TV broadcasts on your PC? TVU Player streams live TV over the Internet using a multicasting technology somewhat like P2P file sharing. This is supposedly more cost-effective than traditional streaming methods. The interface is pretty basic, and doesn't offer any options for tweaking the settings. However you do have a decent list of TV channels to choose from, ranging from Fox News to Star TV. Note however that to use TVU Player, you will need to have Windows Media Player (at least version 9) installed.

Windows Movie Maker 2.1

<http://tinyurl.com/3fpo4>

Windows Movie Maker gives you the basic tools to kick-start your movie-making career! Well, that may be a bit of an exaggeration, but this software has all the required tools to make home movies and whet your appetite for more.

Available only for Windows XP, WMM is an easy-to-use tool that supports drag-and-drop editing, and also allows you to share your movies via e-mail or CDs. To learn how to do that and get a basic introduction to working with Movie Maker, visit the Movie Maker homepage at <http://tinyurl.com/53yvx> and follow the "Getting Started" and "Creating and Sharing Great Videos" link.

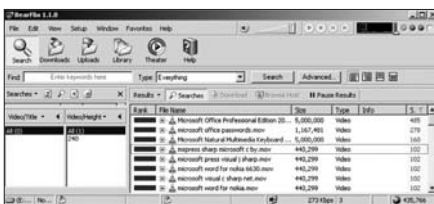
For home videos and beginners, Movie Maker is a great tool with an intuitive interface. If you don't have the patience to sit and read through the very informative tutorials, just fire up Movie Maker, import a video clip and play with it. In less than a hour you will have gotten a hang of all the basics. Movie Maker interfaces directly with DV cameras, and you can copy back edited movies back to the camera tape for playback on the camera—or even on a TV set.

BearFlix

www.bearflix.com

What BearShare did for peer-to-peer file sharing, BearFlix is now doing for video sharing. It has access to over a million sources of

video content and works exactly like its P2P file sharing sibling. Note that you cannot share copyrighted material using BearFlix.

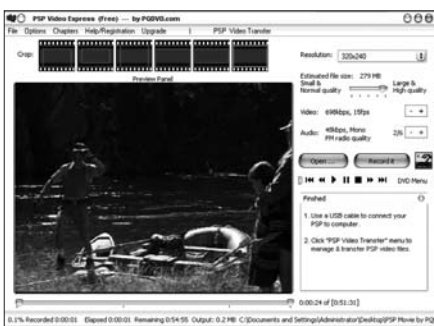


BearFlix: share video

PSP Video Express

<http://pqdvd.com>

This software optimises DVD and video files for viewing on the Sony PlayStation Portable. It is the “lite” version of the more full-featured PSP Movie Creator, and supports features like cutting off credit/cast details to save on space, video thumbnail capturing, video title modification, and more. The interface is somewhat clunky, but it can convert AVI, MPEG, WMV, and other popular formats. It also allows you to control output video size as well as video quality.

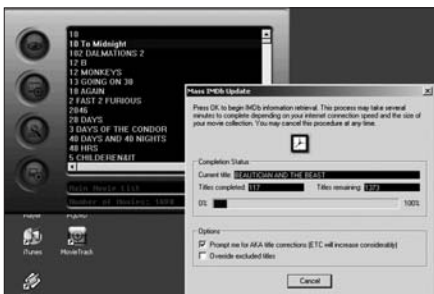


PSP Video Express: play movies on your PlayStation Portable

MovieTrack

www.movietrack.net

This is a small, powerful movie database organiser to keep your DVD, VCD, DivX, and VHS movie collection organised and categorised. It has a lot of powerful, time-saving



MovieTrack: organise your movies

features that make it a pleasure to use. Import your movie list from text, CSV, or HTML files, connect to the IMDb movie database, and retrieve the movies' cover art, actors' list, and plot summary. You can also keep track of who you lend out the movie to, export movie lists, maintain a trailer library, an actor / screenshot gallery, and automatically parse AVI and MPEG files for codec and bitrate information.

DVDBuilder

www.keronsoft.com

This one converts MPEG files to the DVD format, and can be used to create DVDs from your digital video recorders, webcams, or downloaded files.

Video DVD Maker Free

www.protectedsoft.com

If you find DVDBuilder too cumbersome and rigid, then give Video DVD Maker Free a try. You can pull video feeds directly from your video camera, webcams and video files including AVI, DIVX, XVID, MP4, MPG, WMV, ASF, and MOV. The interface is a straightforward three-step Wizard that first asks you to choose your video source—video camera, video file, or already authored DVD file. Once you select your source, the software will transcode to the DVD format, and finally burn the compilation to your writeable DVD. Be warned, though, that DVD authoring is a resource-intensive process, so you'll need a sufficiently powerful PC as well as enough RAM.

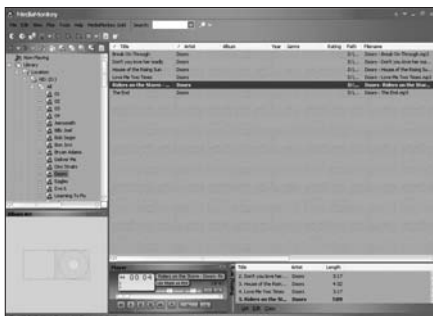
MediaMonkey

www.mediamonkey.com

MediaMonkey makes it easy for even monkeys to manage and organise their music! It catalogues CDs and digital audio files of all types from MP3 to WMA to OGG. Its intelligent tag editor will look up missing Album Art and track information via Freedb and the Web. Integrated CD and DVD ripping/burning, and a full-featured encoder, ensures that you can playback the widest possible range of file formats. It can connect to amazon.com and download album cover art,

and can update and synchronise all the tag information for your files.

MediaMonkey is compatible with most portable audio players including the iPod and various MP3 phones. If you have iTunes installed, it will automatically detect and can look for additional file



MediaMonkey—no monkey business here!

information that may not be available in the file tags. If you are in a party mood, set up the AutoDJ to play selections from the library without any interference while you get down and party! It also supports Winamp, and you can fiddle around with the playback and encoding engine to produce special sound effects by using the plugins available at the site.

QuickTime

www.apple.com/quicktime

With millions of users globally, QuickTime's popularity shows no sign of waning. Built on the H.264 and MPEG-4 formats, QuickTime is the format of choice for streaming video distribution by media professionals in the movie and allied industries. The QuickTime player is a standard companion and a must-have for anyone wanting to view QuickTime video on the Web. One frustration on low-configuration machines is the inordinate amount of resources it consumes. In such cases, consider QuickTime Alternative, available with the K-Lite Mega Codec Pack mentioned in the Essentials chapter.

JetAudio Basic

www.cowonamerica.com

As multimedia software go, JetAudio is hard to resist. It may be difficult to pinpoint exactly why it's such a big hit with millions of users, but the well-laid-out, quickly-understandable interface is no

doubt a contributor. It doesn't automatically ask you for permission to search your hard disk for multimedia files, but that is a minor inconvenience quickly remedied with a few clicks. It can play both music and video files, and supports ripping and burning from and to CDs. The conversion interface is particularly

easy and intuitive, and it supports all major file formats, including WAV, MP3, MP3Pro, OGG, WMA, MPEG, AVI, WMV, MIDI, RM, and video and audio CD tracks.



JetAudio: a very different Experience

You also use the Audio Mixing Recorder to add your own audio overlays during the conversion (up to 10 seconds in the basic version). You can control the speed of audio playback and set cross-fading for smoothing out the transition between two songs. The basic interface looks like an equaliser, and like many others in the category, JetAudio is skinnable. It has the facility to show synchronised lyrics (if available), which is great for karaoke sessions. Extensive customisation options will keep the audiophile busy for hours. The clock and timer make JetAudio unique in that you can use it as an alarm clock or timer and set a specific action to happen at the specified time—start or stop playback, start or stop recording, etc.

You can customise each section of the program, from CD ripping to format conversion, to your heart's content. The inbuilt cross-fader, reverb, and wide-sound modes provide a nice touch not found in most MP3 players. Our only quibble is it treats a playlist as an album but uses the artist as its primary key field, making it difficult to locate mixes. JetAudio Basic's appealing feature set should attract audiophiles.

VIDEO SPLITTING AND JOINING TOOLS

As you've gathered, freeware for anything and everything is available. In the area of video splitting and joining tools, however, we are unhappy to say, we haven't found anything to our expectations. As we wait for that killer free video splitting and joining freeware, here's a collection of what's currently available.

VidSplitter

www.geovid.com/VidSplitter/

This application splits a single video file into multiple pre-defined or user-definable sizes. On the plus side you have a range of output codecs (both audio and video) to select from, so you can also—to some extent—convert your video file on the fly rather than having to prepare it beforehand. However, this falls short of the splitting and joining functions we have in mind. VidSplitter is primarily a tool to split video files into manageable chunks for CD or e-mail distribution, where each file can be viewed independently without needing to be rejoined.

AviSplit Classic 1.43

www.bobyte.com

For quick and dirty cutting and joining of .avi files, AviSplit should do the trick. The interface is clean and there are three tabs—to split, rejoin and clip. Like VidSplitter, Split will break up the source AVI file into optimally-sized chunks that can be played independently. Again, fit for e-mailing or CD distribution. “Rejoin” merges those chunks in the specified sequence. One interesting feature with Rejoin is that you can exclude any parts you don't want, and AviSplit will automatically jump to the next part in the sequence and merge from there forward. “Clip” is used to extract a specific segment by giving the start and stop time within the segment. Though you cannot join a clipped segment to another split, AviSplit does basic splitting and joining, though some more flexibility in joining clips to unrelated splits would have been good. That apart, the only reason we ruled it out as an acceptable candidate is that, as the name suggests, you can only work with AVI files.

SC Video Cut and Split

www.softwareclub.ws/index.html

According to the authors, SC Video is a software that can both extract a clip as well as split a movie into two parts at a specific scene, save a frame as an image, and also play video files at a custom zoom ratio. The application, however, is very buggy, and we gave up as the help documentation is very basic, and we didn't see any FAQs on the site that would be helpful. It also asks you to install a software from Pando.com that is supposed to help you transfer large files of up to 1 GB in size via e-mail. This is somewhat of a threaten-ware (install this freeware or something won't work!) which, of course, we didn't like. Also, as of this writing, the site says the program is free as a promotional offer. This is mentioned nowhere during the installation process, while they state very strongly that without the Pando application, some functionality will be crippled.

CombiMovie

www.bobyte.com

CombiMovie, from the authors of AviSplit, is supposed to be able to join two or more MPEG files into one. Note the keyword: "supposed." In our tests, it joined the two movies all right, but the second half of the movie showed up blank. We were unable to contact the program authors to find out the whys and wherefores. However, if AviSplit is any indication of their methods, there could be a simple answer somewhere out there.

Freesky Video Splitter and Joiner

www.freeskyvideo.com

Splitter and Joiner here are two separate programs. The Splitter program kept giving us an "Invalid operation" error when we tried to select the source file. The Joiner program, though, flawlessly merged multiple unrelated video files, which perked our interest, but just as quickly disappointed when we couldn't hear any audio in the joined file. Presumably there was something we were doing wrong—go ahead, give it a shot; it won't kill you!

System Tools



System tools can refer to those applications that improve the functioning of the system and/or augment its capabilities. In this section we will look at some of the best freeware system tools that are available for download.

4.1 Clipboard Utilities

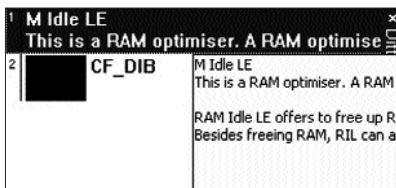
The clipboard is that temporary storage area where data is held in suspension before being passed on to a relevant application. Every time a user selects and cuts / copies a paragraph, the data is stored in the clipboard and made available when the paragraph is pasted elsewhere. By default, every paste operation returns the most recent copy or cut operation. Clipboard utilities allow the user to gain control over earlier clipboard entries. Windows bundles along a clipboard utility that can be used to manipulate the clipboard contents. But, really, how many know where it is? (As it happens, this utility is most easily launched by going to Start > Run and using the “clipbrd” command.) Clipboard utilities are a god-send for those who do a lot of cut/copy-paste. With these applications active, there is no need to worry about following every [Ctrl] + [X] with a [Ctrl] + [V] lest the earlier cut data be lost.

All clipboard monitors offer the following features:

- Storage of the all contents of the clipboard
- Automatic saves, so contents are not erased even when the system is shut down (The Windows Clipboard utility can’t achieve this.)
- Selective transfer to the target application. Users can choose which clipboard content needs to be transferred to an application, not just the latest copied content.

4.1.1 Ditto (<http://ditto-cp.sourceforge.net/>)

After installation, Ditto remains minimised in the system tray, silently storing all clipboard content. A click on the system tray icon pops up the list of saves. Single-clicking an entry offers a preview, and double-clicking transfers the content to the last active application. Frequently-used content is



Ditto popup and preview

pushed to the top of the list, and these in turn can be transferred by pressing a hotkey without having to launch Ditto's main window.

4.1.2 Clipmagic (www.clipmagic.com)

This application takes manipulating the clipboard to a different level. Besides the usual features, it allows the user to create filters to treat clipboard content differently based on different criteria. Additionally, clips can be commented upon, merged, saved to file, and even e-mailed (the outgoing SMTP server needs to be specified first).



clipmagic window

Though it's feature-rich, those looking for ease of use would find Clipmagic a bit too complicated.

4.2 Windows Explorer Enhancements

The Windows default file browser—Windows Explorer (WE)—is adequate when it comes to opening folders and files. For other uses like comparing the contents of two folders, or moving the contents of one folder to another, WE can be a tough customer. This is partly because WE can only operate in a two-pane mode—one pane for folders and the other for folder contents. Explorer replacements offer more file management features than WE does.

4.2.1 Xplorer2 Lite (<http://zabkat.com/x2lite.htm>)

Xplorer Squared (XS) is available in two flavours, with all features unlocked in the paid, professional version. Nonetheless, the free, Lite version is no pushover.

XS Lite offers three panes, which include two folder content panes. This makes it easier to compare the contents of two folders. If you are worried about the alternate scrolling that would need to be done, relax—XS will automatically scroll one pane to mirror the other pane. Two different folders can be opened in the panes, which makes copying or moving files or folders between them easy.

Besides these, XS comes with a file shredder to securely delete files; a file splitter / merger that can chop files into pieces of user-defined size, and merge file fragments; and a bulk-renaming utility that can rename files or reset their attributes according to the user's specifications. Also, frequently-used folders can be bookmarked for easy access.

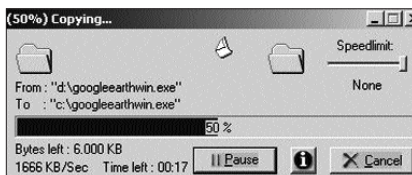


XS panes and more

FreeCommander is another free Explorer replacement that offers almost similar features.

4.2.2 TotalCopy (www.ranvik.net/totalcopy/)

TotalCopy grants a user total control over the file transfer process in Windows Explorer. File transfer can be paused and resumed, interrupted file transfers (as caused by system crash or power failure) can be resumed, and transfer speeds are displayed. It integrates into Windows Explorer and appears only when any file or folder that needs to be copied is dragged to the destination with the right (alternative click) mouse button clicked. This pops up a menu with the option to "Total Copy here" along with other explorer options. The really cool thing about TotalCopy is that it doesn't delete what's already been copied if the



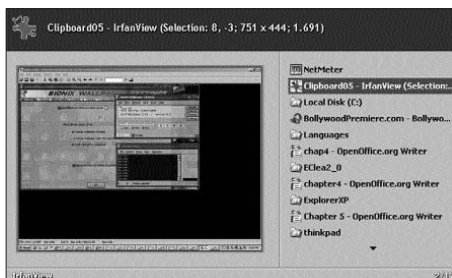
Copying using TotalCopy

copy fails, so you can use it to extract video from corrupted video files on CDs, for example.

4.2.3 TaskSwitchXP

(<http://sourceforge.net/projects/taskswitchxp/>)

This explorer enhancement adds features to the [Alt] + [Tab] key combination used to switch between open applications. With TS installed, the [Alt] + [Tab] combination (or a click of the mouse on the system tray icon) will also show a snapshot of the open applications. It offers the facility of making the



Using TaskSwitchXP to [Alt] + [Tab] better

[Alt] + [Tab] combination “sticky” so the windows list doesn’t disappear if any of the keys are released erroneously. This makes it possible to choose the required window using the mouse.

4.3 Desktop Search Utilities

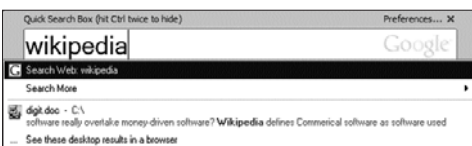
At the outset, it needs to be clarified that a search can take place either on filenames or file contents. Locating a file by its name is comparatively easier since every drive already maintains an index containing all file names in that drive. It is the file content search that is demanding, since every word in every file has to be indexed before relevant results can be presented.

Windows is equipped with an indexing service that can do text search across files. But it is limited to the files it can “read”—so searching for a word that you know is contained in a PDF file and a text file will only return the text file, since Windows cannot read into PDF files. Besides, it is generally considered slow.

The comparison here is regarding the file content search capability, not the filename search capability.

4.3.1 Google Desktop Search (<http://desktop.google.co.in>)

Searching through files was considered the purview of the operating system till Google decided to train its search engine to look for



Google search results

local files. Google Desktop Search (GDS) is for those who are not satisfied with their existing operating system's capabilities in this domain.

Like the online version, there are two components to GDS. The search box forms the front end, which gets results from a database that is maintained by a Crawler that goes around the system indexing data. Until the crawler does a complete indexing of the files the search results will not be complete. In fact, if you try to search just after installing GDS, there will be no results at all. GDS uses the default browser to display results and to configure the engine. This Web page resembles the usual search page at google.com, except that the address bar contains the local address—127.0.0.1.

Google indexes files in the background when the system is idle; the indexed results are stored locally, and take up a few MB of disk space. Users can configure the areas where GDS should or shouldn't index, but otherwise they cannot directly control the indexing process. The status of the indexing process can be seen by accessing "Index Status" option from the System Tray icon.

Off the shelf, GDS can index quite a few file content types like text, Word documents, Excel sheets, Web documents, PDFs, etc. located anywhere on the system including the browser cache. And this capability can be enhanced by the installation of plugins

developed by others (not Google). An indication of the capability of the indexing engine is its ability to work even with password-protected Word and Excel documents. (This can also be seen as a good indicator of MS Office's privacy measures.)

Besides local folders, GDS can be set to index folders on other PCs on a network. The indexing is not a continuous process, and the user cannot set the frequency of indexing.

Google creates a folder called "Google Desktop Data" on the system without informing the user. This contains the indexes created by Google, and they can grow to large sizes. Since indexing is not continuous, it is possible that files that were deleted after the last indexing still appear in the search results. This can be avoided by setting the search to delete these results from the index. New files are automatically indexed, unless this option is turned off, so there is no need to manually re-index every time a new file is added.

By default, GDS uses a sidebar that also contains the search box. Besides search, the GDS sidebar acts as a docking area to add sub-applications that source data from the Net. These "sub-applications"—news tickers, weather forecasters, e-mail notifiers, etc.—can be added to the sidebar, and this content is constantly updated. GDS tracks the user's search habits to customise the content displayed in these sub-applications. This data collection from a private PC may seem intrusive to many. To address privacy concerns, Google does undertake that the data collected is not used in the identification of users.

GDS blurs the offline/online divide when it comes to offering answers, since after all it is the data that matters and not its location. GDS allows integration of a Gmail account, so a history of all searches can be



The GDS sidebar

maintained in your online account. This integration also allows Gmail e-mails to be searched by GDS.

Interestingly, every time you search at Google online, your offline indexes are also scanned, and results (if found) are displayed. The search bar can be customised by the user to appear either as part of the sidebar, or independently. It can also be hidden till a hotkey is pressed. GDS displays matching results even as the keywords are being typed in.

In conclusion, GDS does come across as a better alternative to the default Windows search function. Its way of smudging of the offline/online distinction can be an irritant, though.

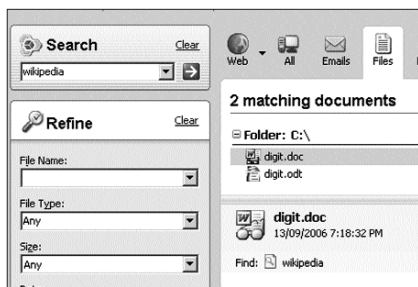
4.3.2 Copernic Desktop Search

(www.copernic.com/en/products/desktop-search/)

Online, Copernic is a meta search engine, which means it employs more than one search engine to arrive at its results. Offline, it is akin to GDS. Unlike GDS, it has its own user interface. CDS, too, has a Crawler that does the indexing, and a front-end that does the reporting.

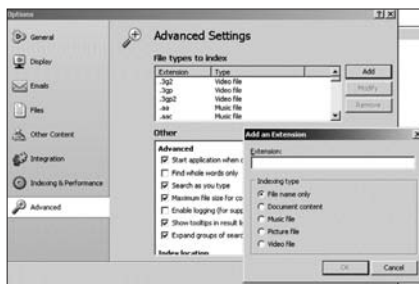
Other reasons that make it slightly more attractive than GDS include:

- Out of the box, CDS is able to index more file types than GDS—including, the file types used by the popular, free, Openoffice.org Office suite—.ods, odt., etc. Any file content type not already included in the searchable types can be included manually, and the mode of search—filename or file content—can also be set. Compare this with GDS, which



CDS' results and preview window

requires a plugin to be downloaded and installed. Modifying the indexing type of a file is possible in CDS—for example, Playlist files (.pls) can be made searchable by file content and not just filename, enabling one to search for song titles in the playlist.



Adding a new filetype in CDS

- The indexing behaviour is more customisable. Its schedule can be modified and the frequency of indexing can be changed. As in the case with GDS, indexing takes place in the background when resources are idle. But CDS allows this to be modified to enable indexing to take place as and when the user desires.
- Indexing by CDS is more transparent, with its progress reported in the status bar. Additionally, the location of the index is user-changeable.
- A preview window allows search results to be previewed.

CDS might thus present itself as a slightly better option, but for those who are seeking the ability to seamlessly integrate online and offline searching, GDS is the only option.

4.4 Privacy Tools

Privacy tools are most necessary when dealing with IE or browsers based on it. Since IE is closely integrated with Windows, it leaves a lot of traces of browsing activity.

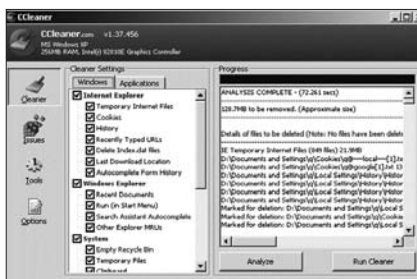
While many consider deleting history files and cache files adequate to cover one's tracks, there are other areas like the Registry where IE keeps information regarding a browsing session. While each of these locations can be manually deleted, it is best to have a program that automates the process.

Browsers like Opera and Firefox are available in portable for-

mat, which are meant to be run off a Flash drive. These browsers do not save any information on the host system.

4.4.1 CCleaner (www.ccleaner.com)

This is a comprehensive browsing history cleaner, that supports all major browsers. Besides covering your online tracks, it also clears system locations like temporary folders. It can scan the Registry looking for orphaned entries, and can clean them.



Set your desired CCleaner options

The Analysis button can be used to verify the files that will be deleted by CCleaner. This is an indispensable tool for those who prefer to stick with IE while valuing their privacy.

4.5 Anti-Spyware

Spyware are applications that gain entry into a system and secretly pass on user details to a remote server. Details of interest include passwords, PINs, and credit card numbers. Unlike other malicious applications, these prefer to cause as little damage to the host system as possible so as to avoid detection. The usual symptoms of a spyware attack include a browser hijack, wherein the browser on startup is taken to a pre-determined Web site, and anti-virus / anti-spyware Web sites not opening, which is a result of editing of the “Hosts” file. (The Hosts file controls how a browser connects to a site. Editing the Hosts file can make the browser load a different page or report the page as not reachable.)

4.5.1 Spyware Terminator (www.spywareterminator.com)

Spyware Terminator offers comprehensive protection from spy-

ware. Acting along the lines of most anti-viruses, it performs real-time monitoring of online data transfers, and alerts the user every time an application tries to modify any browser or system settings. It can also integrate with Clam Antivirus (requires a separate download) and enhance its capabilities in that domain. Much like an anti-virus, it maintains a list of suspicious programs that it needs to be vigilant against. This list is updated from a central server at regular intervals.



Spyware Terminator's Real-Time protection



The Spyware Terminator window

4.5.2 HijackThis (<http://tinyurl.com/b9h3s>)

HijackThis is an advanced anti-spyware tool. Unlike usual anti-spyware, it doesn't directly delete the offending file; rather, it identifies and removes the Registry entries made by such programs. Before HijackThis edits the Registry, it makes a backup, so if required, a step can be undone. A user can identify the offending programs from the registry scan that HijackThis conducts. These files have to be manually deleted, and since most of these programs usually run in the background, they resist immediate deletion. One can use a tool like Unlocker (on the *Digit* CD) to delete such files; however, it is best to run HijackThis when in Safe Mode, since in safe mode the startup program list is ignored, and this is the favoured route most malware programs take to be loaded when the system boots.



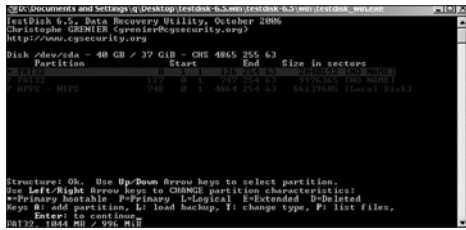
HT configuration and options

recovery. Deleted data has a higher chance of being recovered if disk activity on the drive after deletion has been minimal.

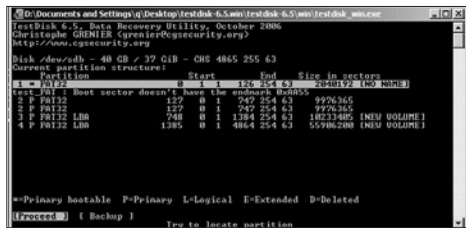
4.6.1 TestDisk

www.cgsecurity.org/testdisk-6.5.win.zip

This little command-line program is an excellent utility for partition table recovery. While the command-line functionality will put off a few, the available options are limited, and the required instructions are presented along with each command. Test disk cannot recover deleted files and folders.



Using TestDisk to check you drives



Once run, it will first analyse the partition table and find if there are any errors. If the partition table is corrupt, it will offer to use the backup to restore the table. Usually a backup of the partition table is stored in another part of the disk, not accessible to users. Problems with the partition table can be rectified in this manner. The more advanced capabilities of TestDisk are beyond the scope of this chapter, but TestDisk can also handle errors where the partition is not properly detected, as is the case when the MBR itself gets deleted. In this scenario, a user can manually enter the hard disk parameters (CHS values), and TestDisk can try to recreate a partition table. The bundled Help file offers adequate guidance to handle some of the situations where TestDisk can be used.

Fixing errors with TestDisk

4.6.2 PC Inspector File Recovery

(www.pcinspector.de/file_recovery/UK/welcome.htm)

This tool can recover data in three situations—when the data is deleted, when the file index (for the FAT and NTFS filesystems) is corrupted, and when a partition is lost. It is not advisable to use PCIFR in a case where the partition itself is improperly detected. For that, one should use Test Disk first.



Finding lost disks/data with PCIFR

PCIFR first scans the attached drives and lists the partitions on it. If there are partitions detected, a further scan will detect the files that can be recovered. This procedure takes time; how long depends upon the size of the partition. Once the scan is complete, the files are presented. A recently-defragmented disk offers a greater chance of correct recovery of files. Right-clicking on the folder will open the option to save the recovered data. One should always save to a location different from the corrupt drive.

4.7 Partition Tools

Before a hard disk can be used to store data, it is advisable to partition it. The drives that ones sees in the explorer pane are the result of partitioning. Windows offers a GUI-based tool to manage partitions, which shields the user from a lot of complexity, and in most cases a user is better off sticking to it. But for the adventurous kind, who have more than one OS on their system, the application that follows offers greater control over the partitioning process.

4.7.1 Ranish Partition Manager

(www.ranish.com/part/)

This is an advanced tool to work with partitions. It supports different filesystems, can create a customisable boot manager, and can backup and restore the Master Boot Record,

Ranish Partition Manager Version 2.44 (Beta) by Maths June 09, 2002											
Hard Disk 1		15 Mbytes (128 cylinders x 4 heads x 63 sectors)									
Using LHM											
#	Type	Row	File	System Type	Starting Cyl	Head	Sect	Ending Cyl	Head	Sect	Partition Size (KB)
0	MBR		Master Boot Record		0	0	1	0	0	1	0
1	Free		Unused		0	0	2	127	3	63	16,128
2	Unused		Unused		0	0	0	0	0	0	0
3	Unused		Unused		0	0	0	0	0	0	0
4	Unused		Unused		0	0	0	0	0	0	0
5	Unused		Unused		0	0	0	0	0	0	0
6	Unused		Unused		0	0	0	0	0	0	0
7	Unused		Unused		0	0	0	0	0	0	0
ENTER - Edit options S - Save MBR to file L - Load MBR from file											
#	Partition	Size	MBR Executable code:		Unknown IPL						
0	Unused	0	Check for Windows		No						
1	Unused	0	Check for Windows		Yes						
2	Unused	0	Boot sector choice:		Net						
3	Unused	0	Boot sector choice:		Net						
4	Unused	0	Default boot choice:		Net						
5	Unused	0	Default boot choice:		Net						
6	Unused	0	Default boot choice:		Net						
7	Unused	0	Default boot choice:		Net						

rpm window

the most critical part

of a hard disk that includes the partition table. But probably the most useful of its features is the ability to create more than four primary partitions—up to 31 primary partitions are supported. Extended partitions are more difficult to handle, since any errors can render all logical drives in it inaccessible, unlike in the case of a primary partition where other partitions are not affected. Deleting, resizing, etc. are also easier in the case of Primary partitions.

It is always recommended to install any additional operating system on a primary partition, since it facilitates easier removal if necessary.

4.8 Firewalls

A single compromised system on a network can create problems for the rest. Since malicious programs can take control of a compromised system and use it to attack other systems, it is essential that every system have a firewall. Every computer that is connected to a network has ports that allow data to be exchanged. Firewalls are those applications that control the data traffic on the ports of a system. How many ports are there? 65535. A firewall monitors the traffic on all these ports and allows or disallows access to programs based on user specifications. Both incoming and outgoing traffic is monitored.

4.8.1 Comodo Personal Firewall

(www.personalfirewall.comodo.com)

Comodo Personal Firewall (CPF) is a free firewall that requires a license to be acquired from the Web site for continued usage. But

D:\Program Files\OpenOffice.org 2.0\program\soffice.bin has tried to use the Parent application explorer.exe through OLE Automation, which can be used to hijack other applications. soffice.bin may be using explorer.exe to conceal its behaviour in an attempt to connect to the Internet with Opera.exe.

Comodo warns you about everything

given the ratings it has received in the review mentioned below, it would be worth the trouble.

CPF has been reviewed at www.matousec.com/projects/windows-personal-firewall-analysis/leak-tests-results.php.

Like all firewalls, CPF exercises due diligence when monitoring traffic, and informs the user and seeks permission regarding access requests by programs. Safe and Internet zones can be configured, and applications can be permitted or denied access either temporarily (for a session) or permanently.

What sets it apart from other firewalls are mainly two aspects. The first is the ability to automatically approve the access requests of those programs it has identified as safe. About 10,000 programs have been categorised as safe by the Comodo team, and the user is not troubled with enabling access for these programs. This database can be updated from the Comodo server. This default behaviour can be modified so that every access request is passed through the user, since some users would like to know every time an application requests Net access without any causative user action. Alternatively, Comodo can also scan the system for applications so that they can be categorised as safe or otherwise, manually, in one go.

Another feature not seen in other firewalls includes the "Application Behaviour

D:\Program Files\SpamExperts\SpamExperts.exe has modified the User interface of firefox.exe by sending special Window messages. Any program trying to modify another program using this method may be a sign of trojan activity.

More comodo warnings

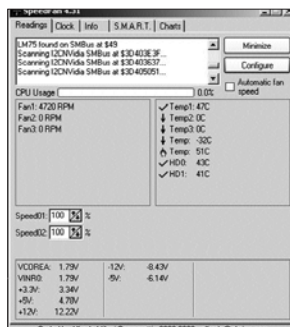
Analysis” module, which can identify otherwise safe applications trying to sneak data in or out after being modified by other applications. Topping the list are applications that, just after uninstallation, open the browser and access the Net, usually to present a feedback page. In most firewalls, since the browser would have been approved for Net access, this action is not flagged down. But Comodo will inform the user about the background program causing the behaviour and seek user direction regarding access.

4.9 Hardware Monitors

This class of applications offer easy access to the readings from the many sensors available on hardware components. Usually, every motherboard manufacturer bundles a capable monitoring application with the motherboard to provide a user easy access to those figures.

4.9.1 SpeedFan (www.almico.com/speedfan.php)

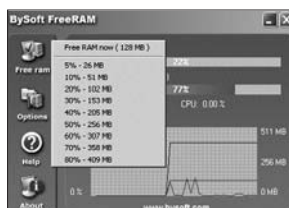
SpeedFan (SF) can be used to track various parameters of a system as reported by the sensors in it. CPU and hard disk temperatures, fan speeds, voltages, detailed RAM and hard disk information are available through SF. Besides displaying information, it can also be used to control the CPU frequency and cooling fan behaviour to ensure that the temperatures are kept within user set limits. It also allows alerting the user, even by mail, in case certain thresholds are breached.



Monitor temperatures, fan speeds and more

4.10 RAM Optimisers

A RAM optimiser is an application that increases the available free physical RAM by shifting some of its contents to the paging file on the hard disk; additionally, it can also defragment the RAM contents for faster access to frequently-used content.



Free-up system RAM

4.10.1 Bysoft FreeRAM (www.bysoft.com)

This application can free RAM based on user requirements. Besides manually freeing RAM, it can also be set to do so automatically without user intervention when the RAM falls below a certain user-specified minimum. The amount of RAM to be freed also can be specified. The program also tracks CPU usage.

RAM Idle LE is another application that offers similar features, in addition to displaying certain system information.

4.11 Hard Disk Optimisers

With prolonged use, the amount of irrelevant data on a system can become significant. Irrelevant data includes those that occupy the temporary folders, registry entries left behind by uninstalled programs, shortcuts that have a broken link, etc. Removal of these data bits helps improve system performance. Defragmentation is also an important activity to keep the system performing well.

4.11.1 EasyCleaner

(<http://personal.inet.fi/business/toniarts/ecleane.htm>)

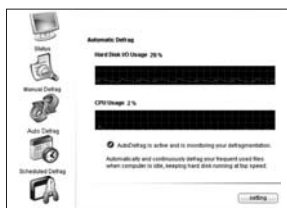
This one can free your system of unwanted data. It can find irrelevant data in the system Registry, temporary folders, add/remove programs list, and startup programs list. It can also search for duplicate files in the system. Additionally, it can delete IE's brows-

er cache, and delete cookies and browsing history.

4.11.2 SmartDefrag

(www.iobit.com/SmartDefrag/)

This application adds some additional features to the defragmenting tool that comes with Windows. One of them is the Auto Defrag feature, which continuously operates in the background when the CPU is idle, ensuring minimal defrag to disk contents. It also offers an express defrag option, which attempts to only defrag selected files and not the whole volume, and therefore takes considerably less time than a normal defrag. Scheduled defragging is also supported.



There's more to defragmenting than the Windows tool

4.11.3 HD Tune

(www.hdtune.com)

This utility offer a bundle of tools to monitor and maintain a hard disk. It can display the hard disk features, its temperature, and SMART properties. It can scan the disk surface for errors and can also benchmark the transfer rates.



Keep a close eye on your hard drives

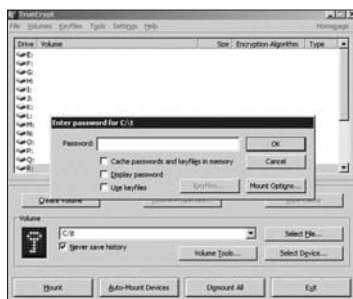
4.12 An Encryption Utility

Data security involves two issues: keeping data safe and keeping data private. Backup utilities meet the need to keep data safe, while encryption utilities ensure data remains private.

4.12.1 TrueCrypt (www.truecrypt.org)

This encryption utility works by creating a virtual drive into which files that require protection have to be transferred. The first step of using TC is the creation of a volume, which can be a file or a

drive. The volume size needs to be specified, and also the access password. After creating the volume, before it can be used, it needs to be formatted and mounted, just like any other drive in the system. Both formatting and mounting is done by TrueCrypt. Once mounted, it appears in Explorer under the drive letter it was mounted. Any kind of file operation can be conducted on the drive, and all content in that drive is accessible as long as it remains mounted. TrueCrypt offers a few encryption algorithm choices including AES and Blowfish. Hotkeys to quickly manage the volumes can also be configured.



Encrypt files in a virtual drive

4.13 A Display Optimiser

4.13.1 ClearType PowerToy

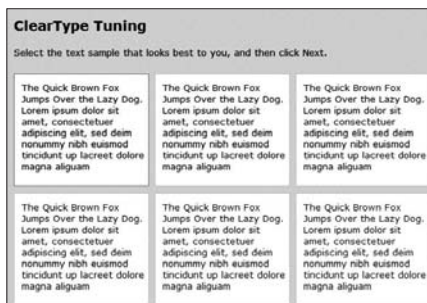
(www.microsoft.com/typography/ClearTypePowerToy.msp)

This Microsoft product can be used to improve the appearance of text on display screens—the greatest difference is visible on non-CRT screens. This application is also available as an online tool where one can set one's display without having to download anything.

A pixel is considered to be the smallest unit of a display area. In theory each pixel is further divided into three sub-pixels—one each for Red, Green, and Blue. To achieve greater readability and smoother edges, ClearType goes beyond controlling a pixel and controls the sub-pixel elements. After installation, the user is presented with an array of textual content of varying properties and based on the selection of which of the content looks the best, ClearType modifies the display. A new entry in the Control Panel is created for the tool and if required, further tuning can be done.

4.14 Process Explorer

Created by Sysinternals, this is now a Microsoft product after a takeover. Much like the default Windows Task Manager (TM), Process Explorer (PE) focuses on offering live information about the system's workings. PE can show the processes running on the system, along with the system resources consumed by each of them. In addition to the data also brought up by Task Manager—like CPU and RAM usage—PE can also show the files that are being used by a process.



Improve your font display

Graphically, it adds to TM's ability to plot CPU and page file utilisation statistics, by including a I/O bytes graph that plots data transfer rates. Additionally, the graph itself is more informative since each process is plotted in a different colour, and information about the process is available as a tool tip. Information about each process is accessible with a right-click, including the individual program's usage of system resources, its connection to remote IPs in case of programs accessing the Net, and most importantly, a search for the specific process can be made on the Net using MSN's search engine. Processes and Process Trees can be stopped, just as in TM. PE can be configured to show up the next time you do a [Ctrl] + [Alt] + [Del] to access the Task Manager, and configuring it thus would be a good idea.

4.15 A System Tweaker: Fresh UI

This application offers the user the opportunity to modify settings buried deep in the Registry. Users of Windows editions other than Home and Starter can use the Group Policy Editor (Start > Run > “gpedit.msc”) to access most of these settings. FreshUI offers a lot of options to configure Windows’ behaviour. Besides tweaking the user interface, options related to the Taskbar, Desktop, mouse behaviour, etc. are accessible. FreshUI also allows modifying the behaviour of applications bundled with Windows, like IE, Notepad, and the Games. You can use it to modify how Windows handles connected hardware. All options are categorised and well described, which makes using FreshUI a pleasure.

Internet Applications



Covered in this chapter are free applications that let you make the most of the Net. These include browsers, e-mail clients, download managers, offline browsers, bandwidth monitors, connection optimisers, IM / chat clients, ad blockers, anti-spam software, anti-spyware, and firewalls. The last two have been discussed in the chapter on security.

5.1 Browsers

Internet Explorer is Windows' default browser, and thanks to the omnipresence of that OS, it is the most popular. Next in popularity comes Firefox, a product from the team responsible for the wildly popular Netscape Communicator browser. Opera comes in third.

5.1.1 Opera 9 (www.opera.com)

We have covered Opera 9 in chapter 6, the chapter on Essentials.

5.1.2 Firefox 2 (www.mozilla.com/en-US/firefox/)

Firefox 2 improves upon previous versions by adding security features like the inclusion of an Identity Theft detection mechanism which alerts users when they visit a link that is questionable, besides adding support for RSS feeds, a spell checker, and the provision to restore a browsing session.

Thanks to its open source nature, a strong developer community is constantly making improvements to the browser while fanatically promoting it. This community is also responsible for the wide choice of add-ons for Firefox, which greatly enhance its core capabilities, making it the most versatile of browsers. While the base download offers a vanilla browser with tabbed browsing and a download manager, it is the add-ons that give Firefox the punch.

Add-ons

Add-ons can be installed by going to **Tools > Add-ons**. The add-ons window that comes up lets one install add-ons and manage those already installed. One can also visit <https://addons.mozilla.org/firefox/extensions/>. Clicking on the “download” link for the add-on downloads and installs the add-on, but for it to come into effect, the browser needs to



Managing add-ons in Firefox

be restarted. There are way too many add-ons (or Extensions) for us to go into here; what follows is a description of a selection of add-ons recommended by the Firefox team.

Adblock Plus

The most popular Add-on, Adblock optionally uses a publicly-maintained list of ad servers to block content from them. This list can be complemented with individual preferences. It can also selectively block Web page content from loading. Right-click on a Web page object (image or flash animation) that is undesirable, and select the Adblock option to prevent it from loading the next time.

To configure Adblock plus, check the relevant entry under the Tools menu. To add a new entry, select the Add Filter button and enter the URL of the site you would like to prevent from sending data. If you would like to prevent a group of sites sharing similar URLs, you can use wildcards. For example, if `adserver.net/ads/`, `adhit.com/ads/`, and `advertise.org/ads/` are to be blocked, you can add `*/ads/*` as a filter.

For a no-fuss experience, also install the Adblock Filterset.G Updater add-on. Your ad server list will get updated all by itself, with the end result just being that you won't see any ads at all!

NoScript

This add-on can be used to block various elements like JavaScript, Java, and plugins including Flash from Web pages. Since scripting is the preferred way of hijacking a system, NoScript greatly improves the security profile of Firefox. The user can selectively configure NoScript to allow certain Web sites to run scripts while preventing others from doing so. By default, NoScript informs the user every time a script is prevented from running.

Fasterfox

This add-on purports to tweak Firefox to speed up browsing. It achieves this by changing browser and network settings like browser cache size and HTTP parameters. By default, Fasterfox

is set to use “turbo-charged” settings, which, by its own admission, increases the load on the Web server. The settings can be customised by the user if needed. Fasterfox can also be set to pre-fetch pages when the user is not actively browsing. Pre-fetching allows these pages to be displayed faster when the relevant links are selected, but if the links are not selected, the pages are discarded.

FlashGot

This add-on allows Firefox to be closely integrated with the download manager in the system. The add on cannot do much per se without an external download manager. It adds links in the context menu that allow downloading of page content and also entire Web sites. On selecting the relevant menu option, the default download manager is launched, with the details of the files to be downloaded sent by FlashGot. This add-on facilitates download of image galleries; right-click on any one image in the gallery and select FlashGot. It will download all links on that page using the download manager.

Video downloader

This one lets the user save video from video sites like YouTube (in total, about 60 such sites are supported). Most streaming video sites like YouTube use the Flash Video (.flv) file format for videos. Video Downloader can also download other video formats like QuickTime and even MP3s.

The videos on these sites are downloaded to the browser's cache as they are being watched. For advanced users, finding the specific file in the browser cache may be easy. Video Downloader lets the user save these files to a different location, thus sparing the user the trouble of wading through the many files in the browser's cache. The add-on appears as an icon in the browser status bar and clicking on it opens a “download video” window from where the file can be downloaded. To view the files, you will need an appropriate viewer—try Wimpy FLV player (www.wimpyplayer.com/products/wimpy_standalone_flv_player.html) (or <http://tinyurl.com/bdq40>).

Sage

Sage is an add-on that allows Firefox to be used as a RSS feed reader. After installation, it appears as a button next to the address bar. Clicking on it reveals the feed reader window. To subscribe to the feed on a site, click on the “Search for feeds” button, which will launch a search window that will list the available feeds on that page. Adding the link will create a new entry in the Feeds list.

Performancing

Integrates Firefox with popular blogging platforms like Blogger and WordPress—adding content to your blog while browsing thus becomes easier. Web page content including images and formatted text can be included in your blog with simple drag and drop or copy-paste operations. An



Performancing: a blog client

entire page can be sent to the blog with a right-click on the page.

After installation, this add-on appears as a small icon on the browser task bar. Clicking on it will display the blog editor. You can set up your blog by using the Account Wizard that appears under the Blogs tab on the right. The usual options as available with any blogging client are also presented here.

FireFTP

Allows Firefox to act as an FTP client and explore FTP servers. After installation, it appears under the Tools menu. Activating it will display the Explorer view of the user's PC on the left and the remote server files on the right. The address bar on the right panel can be used to enter the URL of the FTP server.

Firefox is an excellent browser with loads of possibilities to expand its capabilities. It offers the best of both worlds as it doesn't face as many Web page compatibility issues faced by Opera, and is more immune to malicious attacks than IE is.

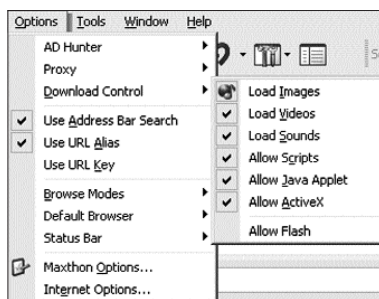
5.1.3 Internet Explorer 7

People who have limited knowledge of Windows, mostly first-time owners, are more likely to use IE because it is already bundled with the operating system. Unfortunately, the popularity of Windows and the limited knowledge regarding online threats among IE users make IE a favourite entry point for malware.

At least from the security perspective, IE 7 is a must-upgrade for these users. The latest iteration of IE, besides being considered to be more secure than the previous versions, also includes tabbed browsing and RSS feed subscription. But for the strict Windows genuineness check during installation, IE7 would have found its way into the PCs of most Indian users.

Maxthon

This browser is built around IE and utilises IE as the browsing engine. But it vastly improves the features offered and makes the interface more user-friendly. It is not considered wise to use IE except as Maxthon. Some of the features that Maxthon adds to IE 6 include:



The download control in Maxthon

- Tabbed Browsing: This, too, allows all open tabs to be saved as a group. It also makes it possible to restore all the tabs of a previous browsing session.
- Easier access to options : Settings buried deep inside IE are now easily accessible under the Options Download Control and Ad Hunter menu. This includes controlling pop-ups, Flash objects, JavaScript, etc. besides ad blocking.
- RSS feed reader client: Maxthon incorporates a feed client. A pop-up informs the user if the page being browsed offers an RSS feed. Feed subscription requires just a couple of clicks.
- Tools: Maxthon bundles a lot of thoughtful extras that make life easier. Quick access buttons to sites like del.icio.us and technorati.com allow easy submissions. There is easier access to trans-

lation sites using the Translation and Service menu, a Flash Save button to save Flash animations, and links to user accounts at Gmail, Hotmail, Bloglines, and more.

- Plug in support: Plugins built for IE work with Maxthon too.

5.1.4 Firefly (www.luciboo.com/content.php?id=61)

While this would seem by name to be another Mozilla Gecko-based browser, Firefly is based on IE. This browser was built by the Children's Technology Workshop (CTW) and offers a different look at safe browsing for children. By default, Firefly opens a children's activity Web page called luciboo.com every time it starts. Rather than have an address bar for URLs, Firefly uses the address bar as a search bar for Google. Google is set to use strict filtering so the results shown are child safe. Navigating to the results requires parental approval in the form of a password if the link is not one of the approved sites. Parents can keep a list of approved sites that can be browsed without permission.



Firefly is meant for kids

CTW also keeps an updated list of child-safe URLs, which is used as the access list for Firefly. Besides this, parents can also set browsing limits/schedules in the form of days and hours that browsing is allowed. Firefly, with its large buttons and pastel-coloured interface, is best suited for young, inquisitive minds.

5.1.5 Browzar (www.browzar.com)

This small program is based on IE. Devoid of any configurable options, it offers a clean interface and a cleaner browsing trail. With no files or entries stored anywhere in the system—no history, no cache, no cookies—Browzar offers the best solution to those who prefer the otherwise mutually-exclusive combination of IE and Privacy.

5.2 Download Managers

Downloading can be achieved by a browser, but a download manager is a dedicated application that offers a few extras. A download manager has the capability to find and automatically link to other servers offering the same file; this allows the download to continue even if the original source were to break down. The ability to schedule a download and shut down the PC after the download is complete is another feature.

All download managers offer the following, so these would be conspicuous only by their absence.

- Browser integration / clipboard scan: this allows for the download manager to take over downloading jobs when any download link is clicked in the browser or copied to the clipboard.
- Speed monitor: Some form of indication of the speed at which the download is progressing.
- Bandwidth control: Limiting download speeds so that concurrent browsing is not adversely affected.
- Simultaneous connections: Creating more than one connection to the source server in order to increase download speeds.
- Mirror search: Finding other sites offering the same file and sharing the bandwidth load across servers. This also improves download speeds.
- Download basket: An area on the screen that can initiate a download when any link is copied onto it. This is of use when browser integration does not apply to the user's preferred browser.
- Preview : Allows the user to view the file's contents before it is completely downloaded. Very useful.
- Scheduling: Start downloads at a particular time; if required, can dial up the Net connection, and shut down the system or close the Net connection when the download is complete.

5.2.1 Free Download Manager

(www.freedownloadmanager.org)

Besides the usual download manager features, FDM integrates a user review system. People downloading a file can offer a review of

the file or the source of the file, which is stored at the FDM site and offered to other users going to download the same file. This can reduce unwanted downloads.

FDM also includes an FTP explorer, which allows browsing through FTP sites, and also a Web site extractor that can download an entire site for offline browsing. It can integrate with all browsers.

5.2.2 Gigaget (www.gigaget.com/download.htm)

This download manager promises to use “Net Grid” technology to speed up downloads. At the FAQ on the site, “Net Grid” is explained thus: “Gigaget applies the most advanced multi-resources and hyper-threading technology; it can tap the unused resources of networked PCs and servers, and improves your download speed by 7-10 times.” While it is hard to comprehend the explanation, Gigaget does manage to find mirror sites faster than other download managers.

Another promise is the use of “Intelligent Disk Cache system which protects your hard disk from high-speed download.” Which means that the hard disk is not written to until the disk cache gets full. While this could reduce the hard disk head movement, thus improving life, an improper shutdown would leave the cached data orphaned, leading to data corruption.

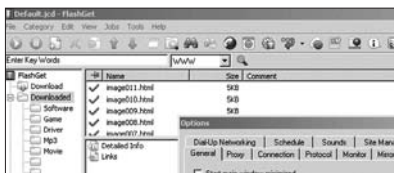
Gigaget is ad-supported, and doesn’t integrate with Opera, but the clipboard is monitored.

5.2.3 FlashGet (www.flashget.com/en/download.htm)

FlashGet (FG) includes a BitTorrent client. It doesn’t integrate with Firefox or Opera out of the box, but the required plugins can be downloaded from the site: www.flashget.com/en/addons.htm.

FG uses automatic bandwidth allocation, unlike other download managers. To clarify, other download managers can be set to utilise a part of the total bandwidth so that concurrent online activities like browsing are not adversely affected. Once a limit has

been set, it not violable. In case of FG, it intelligently shares the bandwidth. So when concurrent browsing occurs, FG decreases download speeds so that browsing is not affected, and when no other online activity is taking place, the entire available bandwidth is used. FG also supports the disk caching feature. A glaring omission is the file preview feature.



Intelligent bandwidth management: FG

5.3 Internet Optimisers

Logically, the speed of your connection can only be increased by applying for a broader connection. But sometimes you may not be getting the most of the connection you already have. Now, one byte = 8 bits. So over a 256 Kbps (kilobits per second) connection, you can download a maximum of $256 / 8$, or 32 KBps (kilobytes per second). Which means it will take you about 32 seconds to download a 1 MB file. Give or take a few KB, if you are already getting this much from your connection, there isn't much else you can do to speed up your connection. Also, this figure is the theoretical maximum throughput. In practice, you will get about 90 per cent of that.

But, unlike dedicated downloading, browsing is a different ball game. Considering that every site that you visit would be loading ads from a few ad servers and loading RSS feeds from a few sites and loading images from a few other image hosting servers, a single Web page will be linked to many other URLs, unlike in the case of downloading, where a far fewer number of connections are involved.

True Internet optimisers influence your browsing speed in two ways: by removing bottlenecks in your system due to inappropriate default system settings, and by reducing the need to access remote data by locally caching it.

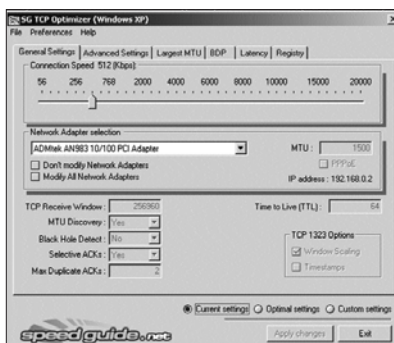
5.3.1 Connection Optimisers

These are utilities that alter Windows' default network settings to suit the kind of connection you have.

5.3.1.1 TCP Optimizer

(<http://www.speedguide.net/downloads.php>)

This is a utility that can change network settings based on the speed of connection you select. The speed settings start from 56 Kbps and go up to 20 Mbps. Depending on the speed of your connection, TCP Optimizer can set the optimal settings by itself, or you can manually enter values. Since Registry entries are modified, TCP Optimizer keeps a backup, and if the modifications prove counterproductive, the values can be restored. Additionally, the settings can also be reverted to the Windows default values.



The TCP Optimizer window

Easy MTU is another utility that accomplishes much the same.

5.3.2 Ad Blockers

Even if network connections are optimised, browsing can be bogged down by unwanted content—for example, ads. Ad blocking can also be seen as a part of optimising your connection, since the end result remains that your browsing speed is reduced to a crawl by all the pop-ups, pop-unders, banners, and Flash ads of all sizes. Ad blocking can take place in two ways—either preventing data from ad-serving URLs from loading, or by blocking images of a certain size (for example, banner ads usually stick to the same dimensions).

5.3.2.1 Proxomitron (www.spamblocked.com/proxomitron/)

Proxomitron offers the most comprehensive protection from



The options in Proxomitron

unwanted data. It is a proxy server that acts as a filter between the Net and the browser. By controlling the requests being sent by the browser and the content channelled to it, it can clean up a browsing experience from ads, malware, pop-ups, etc. It can also act as a privacy tool by restricting browsers from sending data to Web pages.

Proxomitron, as mentioned, is a proxy server, which means that to use it, the browser needs to be configured to use a proxy. This can be done under the browser options. The HTTP proxy field has to be set to 127.0.0.1 with port number as 8080, and you're set.

The next time you visit a Web site, you can see that ads are no longer displayed; rather, just an "advertisement" label shows up. This is because Proxomitron already comes with a list of ad servers that are blocked. Additionally, Proxomitron can be further configured to exclude different Web page elements like Flash animation, pop-up windows etc. and prevent Web pages from controlling browsing by using a script—like preventing right-clicks or hiding the main menu of the window through JavaScript, which some Web sites do to prevent visitors from copying content, notably images.

Needless to say, Proxomitron is required only if there's no browser add-on that satisfactorily cleans up the Web. But it is an advanced tool and offers many more options, making it an essential tool to try out.

5.4 Bandwidth Monitors

These are informative tools that can track your Net connection's bandwidth usage. This information is useful to ensure that you are getting the speed that has been promised, and whether you are optimally utilising the bandwidth. All monitors usually offer a graphical representation of the data being transferred in both directions.

5.4.1 Netmeter (readerror.gmxhome.de)

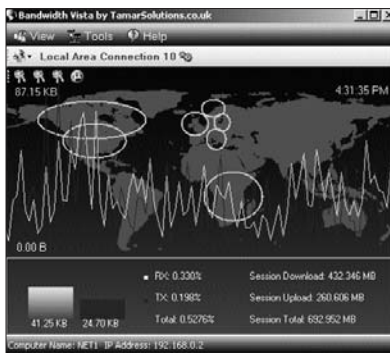
Netmeter is an excellent monitor because of its extreme customisability and reporting capabilities. Besides showing a graph of the current downloads and uploads in different colours, it also displays the totals for durations like day, week, and month, even offering an extrapolated estimate for each duration. It can also alert the user if certain user specified transfer limits are crossed.

The graph window itself is completely customisable. The graph colours can be changed, and the window resized and repositioned. On XP, the graph can be made visually transparent. The windows can also be made to allow click through—meaning that items that are overlapped by the Netmeter window can be operated. The graph can be configured to display transfers over a period of time.

5.4.2 Bandwidth Vista

(www.bandwidthvista.com/download.htm)

Another bandwidth monitor worth mentioning. While it remains significantly unwieldy compared to Netmeter, it accomplishes the basic task of displaying bandwidth usage. It brings in an additional feature—geographical mapping. It can identify, on a world map, the locations of the PCs which are connected to the user's PC.



Bandwidth Vista—a must-try

5.5 Offline Browsers

This class of applications is useful if you have limited Net access. If you regularly visit a site, rather than go online every time you want to visit it or save every page individually on the hard disk, you can use an offline browser to do the job. Such applications visit the site and download all pages on it (it helps if the pages are linked using simple HTML), even following the links on the pages and downloading those pages too.

There is a flip side to downloading a Web site. Since ads are what keeps the site creator from pulling the plug to the site, it would be beneficial to him if you visit the site repeatedly rather than just once to download it. As a precaution, some sites do not allow non-browsers to visit the site; some are created dynamically without using proper HTML links—as in the case where your link points to something that ends like “&p=2”.

All offline browsers have the following essential features :

Mimicking

As mentioned, some sites prevent non-browsers from visiting them. So offline browsers should be able to mimic popular browsers like IE or Firefox to gain entry.

Data and Link Filtering:

Filters can be set so you do not end up downloading irrelevant content like ads, and even content from other sites. You can set filters to enable the downloading of files that are under a specific directory. Filtering is very important since it is possible that if an offline browser is set loose on a popular site that is linked to many other sites, it may end up saving the entire Net.

Incremental downloads

Web sites that have been downloaded once need not be downloaded entirely every time they need to be updated. An offline browser can find and download only those pages that have a cre-

ation date later than the date of the last download.

Scheduling

Since Web site downloading can take considerable time, an offline browser can be set to shut down the PC once it is done.

WinHTTrack (www.httrack.com) and WebReaper (www.webreaper.net) and two capable offline browsers that offer almost similar features and functions. The former is more user-friendly.

WebRipper (webripper.dnsalias.com) is an offline browser that only downloads the non-HTML content of a site. It doesn't have a scheduler.

5.6 E-mail Clients

Offline e-mail clients reduce the time spent online, so people using a dial-up connection would find these applications useful. There are many ways to access remote email, of which POP and IMAP are the protocols popularly used. While POP (POP3 in its latest version) offers fewer features for mail management and is older than IMAP (IMAP4 in its latest version), it is more widely used. The most patent difference between these protocols is that POP3 usually deletes the emails from the server once they have been sent to the client, whereas IMAP doesn't. POP3 clients need to be configured to leave a copy on the server if the user prefers it that way. Most e-mail clients support both protocols. Features common to e-mail clients:

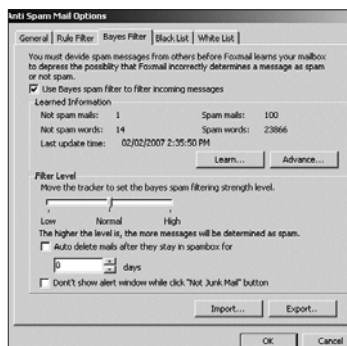
- Configurable e-mail display windows: The layout of the windows can be changed to suit the user's needs.
- Folders: Help categorise mails.
- Filters: Can be set to divert mails to folders based on their content and source.

5.6.1 Foxmail

(www.foxmail.com.cn/download.htm)

A capable mail client that shies from the spotlight. Foxmail 5 proved to be popular beyond its native shores—China. Yet, the latest version

(version 6 beta 4) doesn't come with any official English version or English language manual. With an interface entirely in Chinese, installation is a matter of guesswork. The trick to get you on your way is to delete the Chinese language file—`chinese.lgb`—from the installation directory (right-click on the program icon on the Desktop, choose Properties, then Find Target to get there quickly). This removes the Chinese characters from the interface, and restores the corresponding English terms (surprisingly).



Foxmail's anti-spam options

What sets this client apart from the others is the presence of a utility that allows e-mails to be directly manipulated at the mail server before being downloaded to the local PC. The other feature is the inbuilt SMTP server, which allows mails to be sent without having to use the SMTP server of the e-mail provider. You need to enter your DNS address before being able to use this. To find your DNS address, when online, type in "ipconfig /all" without the quotes at a command prompt. The mail compose window has an "Express Send" button that lets you use this capability.

An RSS feed reader is also bundled.

5.6.2 Thunderbird

(www.mozilla.com/en-US/thunderbird/)

From the same stables as Firefox, Mozilla Thunderbird is a good offline e-mail client. Besides the usual features, it also packs in an RSS feed reader and a Newsgroup reader.

5.6.3 Pegasus

(www.pmail.com)

This is an e-mail client that, besides the usual stuff, features a "mail merge" tool for customised, mass e-mails. You need to pro-

vide the e-mail addresses and names in one file called the data file, and the specially-formatted message body, in a Format file. The data file is usually a text file with Comma / tab separated values. The Format file has the message body with places where the values from the data file are to be inserted, circumscribed by the tilde sign (~). So the Format file will read:

“~1~ ~2~, This is to remind you that ~3~ is your birthday”. The values 1, 2, and 3 in the Format file will be replaced by the values from the data file by order. So the data file will have values arranged something like: “Dear”, “Mr Lucky”, “19.1.07”.

5.6.4 Eudora (www.eudora.com)

Eudora is available in both paid and free versions, though it is distributed as a single package. Features can be unlocked after entering a registration key that can be purchased. While the package size is reflective of the features available to a paid user, a free user is deprived of most of them, most glaringly a spam filter. This considerably decreases its attractiveness as a free e-mail client. To add to this, you also have to put up with ads.

Besides the usual toolbars and panes seen in most mail clients, Eudora incorporates two aids. The first one offers an indication that the tone of the email is offensive. This tool can be configured to delay the sending of offensive e-mails so that the sender has a rethink before it is too late.

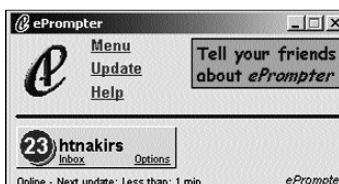
The other tool is ESP—Eudora Sharing Protocol—which allows two or more people using the Eudora client to share a common set of files. The files are kept up-to-date through e-mail.

5.6.5 ePrompter

(www.eprompter.com/)

This nifty little application isn't primarily an e-mail client; rather, it's an e-mail notifier. E-mail notifiers are applications that continually monitor the user's remote mail box and inform of the arrival of new mail.

ePrompter supports POP3 servers, besides the popular free Web-based mail providers such as Gmail, Yahoo!, and Hotmail. Once the server details are entered during setup, the program minimises to a system tray icon. The fre-



Part of the ePrompter window

quency of checking the mailbox can be set. The system tray icon shows the number of new mails. By default, ePrompter reads only the e-mail headers, so you can't read the entire message. This behaviour can be changed to allow the entire mail including the body to be downloaded by ePrompter. E-mails can be deleted right on the server without them being downloaded.

ePrompter also can be used to compose and send mails, in which case a line is appended below the mail stating its source. Though ePrompter offers the services of a "general SMTP server" for outgoing emails, this is not reliable, so to send mails, you'll need to enter your email SMTP details too.

ePrompter supports up to 16 mail accounts. One minor but jarring habit of ePrompter is its insistence on overlooking the "mail read" status on the server—at least in the case of Gmail.

5.7 IM Clients

Most free IM service providers have their own dedicated client—Yahoo!, MSN, Rediff, ICQ, Google Talk, etc. are all dedicated IM clients of the respective service providers. Each of these clients has their own features which are influenced by the services offered by the providers, and mostly, they do not allow cross communication. (Only recently did Yahoo! and MSN Live allow cross communication.) We shall review Cross Platform IM Clients (CPIMC)—applications that allow users to chat with people on different clients. Interestingly, Google Talk seems to be ignored by most CPIMC makers.

The basic features found in most CPIMC (besides supporting Yahoo!, MSN, ICQ, AIM, etc.) are:

- The ability to import contact lists, so you need not create the list all over again
- Various privacy options, for example, to remain invisible or ban certain users from sending IMs to you
- The ability to transfer files
- Keeping you updated about e-mails in the Inbox of each account
- Voice chat in addition to text chat

5.7.1 Miranda

(www.miranda-im.org/)

This open source CPIMC uses the Firefox mode of distribution, with a basic IM client forming the base download, and a host of plugins available to extend capabilities. It has been built with portability in mind, and doesn't require any installation. The base download supports AIM, ICQ, Yahoo!, MSN, IRC, and Jabber. If needed, more networks can



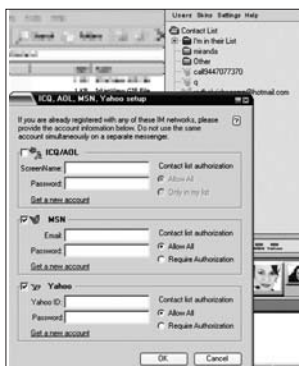
The Miranda window

be added by appending a plugin from the existing 350 odd—including one that allows integrating with the Skype Network, and another that can let Miranda receive instant notifications for new mails in your Gmail account (but not chat over the Google Talk network). While voice chat across platforms is possible, video chat requires installation of an add-on, and can only be done between Miranda clients.

5.7.2 Instan-t

(instan-t.com)

This CPIMC supports the usual IM networks, and also adds its own eponymous network. You need to sign up to the Instan-t network before being able to use the client to connect to other networks.



Windows in Instant

5.7.3 Trillian

(www.ceruleanstudios.com)

Trillian is available in free and paid versions. Only the paid version sports all the features of the client, while the free version offers all the essential features except for video chat.



Windows in Trillian

5.7.4 Other chat clients

5.7.4.1 Yahelite (www.yahelite.org/)

Yahoo! is the only IM network that offers public chat rooms. Unfortunately, one's experience in these rooms is marred by bots that send automated messages, mostly ads. Yahelite is the solution. It does a good job of keeping the chat session clean. It also supports voice chat. Navigating to different chat rooms is a bit circuitous compared to the original Yahoo! IM client, though.

5.8 Anti-spam Applications

Though some e-mail clients already have anti-spam measures, dedicated anti-spam programs are also available to bolster the defence.

5.8.1 SpamAware

(www.jam-software.com/software.html)

This application works as a plugin for Outlook and Outlook Express. It integrates with the interface as a toolbar and performs the required weeding out after the mail has been downloaded. It utilises SpamAssassin, which is a spam-identifying program to score incoming emails. Users can set the score level for classifying an e-mail as spam. The user can also classify senders into a Whitelist or a Blacklist, and any subsequent email from a blacklisted address is either sent to a user-defined folder or marked in the subject as “spam” (the user can set a filter to move e-mails with “spam” in their subject to any folder of his preference).

5.8.2 Spam Experts Home

(www.spamexperts.com/products-services/spam-experts-home.html)

This application supports many e-mail clients, even the one bundled with Opera, and more can be manually added. It doesn't integrate with the client; rather, it acts as a proxy between the remote server and the client. A system tray icon is the only indication of the application running.

E-mails are first downloaded by the application, and then passed on to the client after verification. Only non-spam mails or mails that SEH has categorised as “Unsure” are passed on to the client. There is no need to configure the client to work with SEH.

SEH can be configured to periodically check the server for emails. If the periodical checking is disabled, the server is checked only when the client is launched. In both cases, only e-mails that are not identified as spam or emails from those not in the blocked list are passed on to the client. The blocked emails remain with SEH, and to verify if these emails have been correctly marked, the user needs to open the SEH window.

SEH needs to be trained to identify spam mails, and all mails are initially categorised as “Unsure”. The user needs to correctly classify the “Unsure” e-mails as “spam” or “not spam” before SEH correctly identifies them automatically. This classification is in addition to the permitted or blocked e-mail sender classification.

5.8.3 SpamBayes 1.0.4

<http://spambayes.sourceforge.net>

If you use a desktop e-mail program like Outlook and are drowning in spam, then you will love SpamBayes. Derived from the work of Internet stalwart Paul Graham, SpamBayes’ approach to killing spam is by using sophisticated statistical algorithms that score each message based on keywords in the text. This is somewhat similar to what other anti-spam programs do (commercial or free) but with one difference. The SpamBayes team uses some significantly different methods (maths students who are curious to find out more, go to <http://spambayes.sourceforge.net/background.html>) that yield better results.

If you use Outlook, there is a plugin available that will directly integrate with SpamBayes. If you use a different POP3 client like Mozilla Thunderbird, SpamBayes sits between it and your POP3 server to filter and process messages.

SpamBayes classifies all messages as spam, ham (good mail) and “unsure.” Initially, you need to train SpamBayes to differentiate between spam and ham. Once trained, SpamBayes will shift all present and future spam and unsure messages to separate folders which you can then review and delete at your leisure.

SpamBayes has extremely high accuracy—98–100 per cent over time. The number of false positives gradually drops, and eventually you may even forget that SpamBayes is working!

Essentials



You should never go into a format-reinstall session without these. From anti-virus to browser, the applications that follow are the bare necessities you need to turn your PC into a useful appliance that actually *does* something.

6.1 Opera 9.1

Opera burst on to the browser scene with the claim of being the fastest browser available, and it is. That apart, there are many other features of Opera that give the impression that it has been very thoughtfully put together. Creating a happy browsing experience is Opera's core philosophy, and it is easy for users of Opera to find fault with other browsers.

This usability comes at a price, though—reduced compatibility. Many sites are not tested or optimised to work with Opera, and as a result, some Web pages do not render as expected, and page objects malfunction. Menus and other script-based Web site elements are notable problem areas. An example can be seen at <http://www.novell.com/services/>, where activating the top row menus causes the picture in the middle to disappear. As mentioned by the Opera team at <http://operawatch.com/news/2006/06/an-inside-look-at-how-opera-works-on-site-compatibility.html>, the inconsistencies seen are many times the result of improper code rather than deficiencies in Opera. But if the ones you regularly visit are displayed fine, Opera is the browser for you.

Opera offers the most screen space among all the browsers, and unlike the others, it is feature-rich right out of the box. There is no need to install plugins or add-ons to get the best browsing experience. The feature list is extensive, and at the end of this brief feature description, the only question one would have to ask is this: How is all this squeezed into a 6 MB file?

A description of all of Opera's features is beyond our scope here, and we talk about the ones that can quickly become indispensable.

- **The Context Menu:** Like all good applications, Opera comes with a powerful right-click. “Paste and Go” is a nifty feature that pops up on right-clicking on the address bar. Unlike the regular “Paste” function, Paste and Go saves you the effort of an additional press of the [Enter] key.

When browsing, select some text and right-click to reveal intelligent options. Like “Go to URL”, which will get the browser working immediately without the labour of a copy-paste-[Enter]. The right-click also reveals a search option, which frees you from the need to first get to Google and then enter the relevant text. Translation services and dictionary sites are all similarly within easy reach.

- **Customisation:** Opera offers a lot of user interface customisations. It is possible to drag and drop links to bookmark them, and to remove unused menu buttons or to reposition frequently-used ones.

Disabling images takes just a click of a button. If you are confronted with a Web site with a black page and grey text, legibility can be greatly improved by overriding the default page style—with a single click. Font size can be increased—with a single click. The buttons to achieve these results can be dragged and dropped onto the toolbar for easy access.

- **Easier access to functions:** No need to dig through the many levels of the Options box every time you need to disable JavaScript. All such similar facilities are easily accessed from the **Tools > Quick Preferences** menu. The Quick Preferences also allows toggling the inbuilt pop-up blocker, toggling the use of a proxy server, toggling plugin content (most notably Flash content), etc.



Use [F12] anywhere to bring up the Quick Preferences

- **Individual site settings:** Opera allows you to modify individual site behaviour. So rather than disabling JavaScript for the entire browser every time you visit an especially tricky site, Opera can be set to disable JavaScript for one specific site. Once these preferences are set, they come into play upon every subsequent visit. This feature can also be used to individually

control the behaviour of ads, pop-ups, Flash objects, etc. on a per-site basis.

- **Information:** Opera has an information-laden status bar. Unlike other browsers, which just display a progress bar, Opera tells you the page loading status in KB, the URL sending the data, the number of images on the page and how many of them have been loaded, the speed with which the transfer is taking place, and the time taken to load a page. As a result, it is easy to comprehend why certain pages take some time to load.
- **Shortcuts:** Searching for a word in Google requires you to visit the site and then put in the terms. With Opera, you can set a shortcut key for a search engine—any search engine—and search off the address bar! Thus, typing in “g <space> biography gandhi” will take you to the Google results page. Opera comes with a few shortcuts inbuilt, but more can be added. For example, while Dictionary.com is not innately supported, one can have any word looked up by adding the following text in the corresponding box under the Search tab in Preferences:

Name—“Dictionary”, Keyword—“d”, Address—“<http://dictionary.reference.com/browse/%s>”.

Now, to look up any word, just prefix it with “d” and you will be taken to the results page at dictionary.com.

Keyboard shortcuts are available for every browser function, and if that were not enough, movements of the mouse can be used to control the browser. A left drag with the mouse will take you to the previous page. In Opera 9, voice activation features have been added (separate download required).

- **Skins:** The Opera community offers you many user-created themes. To help with the installation, Opera has an integrated skin search-download-apply feature. As an additional time saver, Opera offers a choice of colour schemes that can be applied to each skin, thus multiplying the customisability options. You can get to the feature from **Tools > Appearance > Skins > Find More Skins**, or you can visit <http://my.opera.com/community/customize/skins/>.

- **Widgets:** New in Opera 9 is the concept of widgets, which are small sub-applications that work in conjunction with Opera. These can be downloaded and run by using the Widgets menu. The Opera community offers many widgets; some are useful and informative like news tickers or weather forecast widgets, while some are just fun—for example, online “buddies” that perform antics on the screen. New widgets can be installed by using the Widgets menu or by visiting <http://widgets.opera.com/>
- **Browsing Sessions:** If you are one of those who usually have about 20 tabs open, Opera offers the option to save these URLs as a session, rather than having to bookmark each URL. So the next time you start Opera, all 20 tabs will open up.

The Opera browser is a work of art, but there is even more. Opera bundles a capable news/RSS reader and an e-mail client in its small frame, and to top it all, it packs in a download manager. And it also acts as a BitTorrent client!

In conclusion, Opera offers the best browsing experience. Period. But users who are not inclined to explore the interface to find the many options available will not be able to make the most of it. Site incompatibilities weigh against the use of Opera as a basic browser, and for light users, Opera is not recommended. But for those who spend a lot of time browsing, Opera, with its faster loading times and inbuilt tools to reduce unwanted Web page bloat, will be an indispensable tool.

6.2 VLC Media Player

VLC media player started out as a student project at the École Centrale Paris. VideoLAN, the initial name of the project in 1996, was aimed at enabling the viewing of television on student PCs. The project led to the development of the VideoLAN Server and the VideoLAN Client (VLC). In 2001 it became an open source, cross-platform client for streaming server solutions.

VLC is a light player in terms of the setup file, disk space occupied, and also the RAM it uses while playing movies. VLC is also the most sought-after player, with downloads reaching more than two per second! It is robust and stable, and plays media files of almost any type one can think of. QuickTime, RealPlayer, and Windows



VLC plays practically anything
RealPlayer, and Windows

Media Player support their proprietary formats and also a few other common formats. For formats that are not common, and for proprietary format of other players, they require you to download and install a codec. VLC, on the other hand, has all the codecs required for playing even the rarest of media file formats. Add to this its cross-platform nature—it also works on Linux and Mac OS X—and you can see why VLC is called by many the best player around.

File types supported include MPEG1, MPEG2, MPEG4, .iso, .dcmp, .flv, .3gp, and .ogg, which is not a comprehensive list in the least! VLC can also capture unicast (communication between a single sender and a single receiver on a network) and multicast (communication between a single sender and multiple receivers)

video streams. The player can also capture a TV signal if you have a TV-Tuner card, and allows you to watch and save programs.

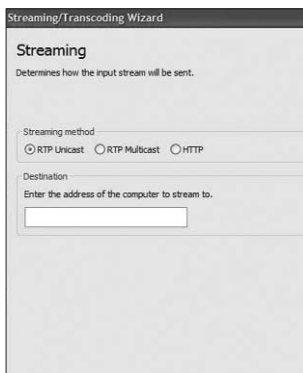
It's also possible to stream a video (unicast or multicast) over a LAN using VLC. There is a step-by-step Wizard for this under the File menu, and we've also done a feature on this in our January 2006 issue.

The player allows you to crop the image without changing its shape. "Wallpaper", under the Video menu, allows taking of a snapshot of the screen make it the Desktop wallpaper. "Snapshot", also under the Video menu, allows you to save a snapshot of the current frame to the desired location.

If you have a dual-monitor setup, VLC player can also be used to view the same movie on two monitors. In fact, you can also drag the window on one of the monitors to display the movie across the two screens.

Check the "Clone Video Filter" box, save your settings, and exit. When you restart the video, you'll see two VLC windows showing the same scene. Drag whichever window you want to the second monitor and double-click to view the video in full-dual-screen mode!

VLC is arguably the best player around: no other player is so versatile while being free. A must for every system!



Broadcast your videos over the Internet or LAN with VLC's Streaming Wizard

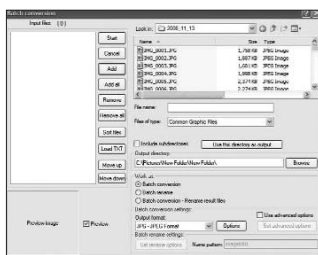
6.3 IrfanView

This software, first developed in 1996, is one of the lightest photo viewing and editing software around. It occupies just 1.8 MB of system RAM with a regular image loaded—and add to that the fact that the setup file is less than 1MB, and you know it's really light.

During setup, you're asked to choose what extensions you want to associate with IrfanView. We'd recommend "images only"—meaning "all images"—unless you also want to watch video on IrfanView. Yes, it can handle video too!

As with all good software, the interface is simple, with all the features nicely tucked under the respective menus. This is a feat, considering there are so many options.

"Thumbnail" under the File menu opens an Explorer-like interface which allows one to have a thumbnail preview of the files supported by IrfanView. "Select from TWAIN Source..." allows one to acquire images from sources like digital cameras, scanners, and TV-Tuner cards. "Acquire/Batch Scanning" not only allows one to acquire a group of images, it is also possible to rename all of them in a single go. Here, one has the option to convert the file type of the file being acquired. For example, if you've taken a photo using your digicam in RAW format and you want to convert it to JPEG, you can do so in "Acquire/Batch Scanning".



IrfanView's Batch Converter is insanely useful



With the right plugins, IrfanView becomes a powerful all-round media player

“Copy Shop...” allows you to take printouts of the document under the scanner, making IrfanView function like a photocopying machine. “Batch Conversion/Rename...” allows one to convert multiple images to different formats, along with the ability to choose the output quality of the converted image. The renaming function is useful if you have folders of images or other content with the names all messed up.

As with other image editors, IrfanView allows you to crop, rotate, insert text into, resize, change aspect ratio of, set as wallpaper, convert to greyscale, and sharpen the image. There’s even a red-eye removal function. “Enhance Colors” under the Image menu allows one to change the contrast, do gamma correction, and change saturation, colour balance, and brightness. Under “Effects”, you get some basic Photoshop-like effects; if you find an effect that is not available here but is in Photoshop, you can download the plugin from the IrfanView home page (www.irfanview.com). Multimedia plugins, plugins for numerous unheard-of image formats like .ecw, .fpx, .lcr..., filters, and miscellaneous plugins for FTP, e-mail, JPEG-Transform, and more can be found at the homepage.

Like we said, unlike other image editors, IrfanView allows you to play audio and video files. Numerous audio and video formats like .mov, .wmv, mpeg, .ra, Ogg Vorbis, and Flash can be played.

If playing with colours interests you, try “Swap Colors” under the Image menu. Animated GIFs can be viewed and stopped in between; also, you can extract all the frames of the animation using **Options > Extract** all frames.

One can send the currently open image as an e-mail (using the e-mail plugin) without opening a browser or e-mail client. The JPG Lossless Operations plugin allows you to flip or rotate an image without losing image quality. “Capture/Screenshot” allows one to take a screenshot of either the whole desktop area, foreground window, or just the “client area” in the foreground window (with-

out the window bar, etc.). The “automatic timer delay” allows screen capture at preset time intervals.

Versatility, many useful tools, and a small footprint make IrfanView undoubtedly a most essential software.

6.4 K-Lite Mega Codec Pack

One can find hundreds of codecs for audio and video, but K-Lite Mega Codec Pack, like its name suggests, is a bundle of codecs of various types, both audio and video bundled together.

It is actually a compilation of three codec packs—K-Lite Codec Pack Full, QuickTime Alternative, and Real Alternative. QuickTime Alternative allows one to play files without having to install the QuickTime Player. Files such as .mov, .3gp, .qt, and streaming content from Web pages run under QuickTime. Similarly, with Real Alternative, one can do away with RealPlayer for playing RealAudio (.ra, .rpm), RealMedia (.rm, .ram, .rpx, .smi), RealText (.rt), and ReadPix (.rp). K-Lite plays all these file types and many more using codecs through a Windows Media Player like interface called Media Player Classic. This player plays DVDs with real-time zoom and subtitle support.

K-Lite has many tools that will help one with encoding audio or video files. Bitrate Calculator is a tool allows one to calculate the approximate size of a media file when converted to the XviD format. This is useful when you want to encode a media file—for example .dat or .vox—to the XviD AVI so as to fit it in a CD.

GraphEdit is another tool in K-Lite Codec Pack. It is the best way to extract audio from a DVD. Dragging and drop-



Extract DVD audio using GraphEdit

ping of video files into the GraphEdit interface shows a graphical representation of how the video file is rendered. One can easily change the filters (by the drag and drop method) and test the output as well.

GSpot is a tool that tells you the type of codec needed to play an audio or video file. It also tells you if the system has the required codec installed. Dragging and dropping or opening a media file tells you the length of the movie, frame rate, bitrate, total frames, screen ratio, and more details. LameDropXPd allows you to encode a file to the MP3 format by just dragging and dropping audio files into a little iconic interface.

A tool called Sherlock informs you about the audio and video codecs installed, their versions, and all the details of each codec. VobSubStrip shows a list of subtitles of .vob files (DVD movies). Selecting the subtitle stream rips that subtitle from the movie!

6.5 Avast! Home Edition 4.7

Avast!, unlike most anti-virus software, has a user interface that more or less looks like a media player. Specific areas like removable media, folders, and local disks can be scanned. The sensitivity of the scan can be changed using the pop-up slider.

There are three levels of sensitivity—Quick Scan, Standard Scan and Thorough Scan. One can start, pause, and stop scanning by clicking media-player-like icons.

Resident Protection continuously scans for virus-like activity in the system. In Standard mode, Resident Protection checks for executables when one runs



Avast!'s easy interface is even skinnable

them. When mails in Outlook are opened, when documents are opened, when scripts are executed, they are scanned for viruses in Standard mode. In High-sensitivity mode, Avast! scans even files that are being copied and also all the messages in Outlook, including unopened ones. Resident Protection also provides protection for Outlook/Exchange, Instant Messaging, P2P, worms, browsing sessions, and for blocking access to specific Web pages.

VRDB (Virus Recovery DataBase), also known as the “Integrity Database,” is a unique feature in Avast! that aims to provide an additional security measure against viruses. If a virus gets into the system even after all the security measures, it is possible to repair infected files by returning them to their original state, using the VRDB.

Avast! updates its antivirus definitions automatically when connected to the Internet like in other anti-virus software, but unlike them, Avast!’s anti-virus updates are small—usually 100-250 KB. Updates are available whenever a new worm or virus is discovered. This is a boon for users who have slow Net connections. Whenever there is a new version of the program available, a popup informs you: “A new version of Avast! is available...” Downloading this will just update the program, and the entire Avast! setup is not downloaded.

Anti-virus software is benchmarked in terms of detecting capability, system resources consumed, features and added utilities, and how often the anti-virus detection files are updated. We took e-scan, which uses the Kaspersky anti-virus engine, Norton Antivirus 2007, AVG 7.5, and Avast! 4.7 to see how they fared. A folder containing 1.35 GB of assorted data was used for the test. The time required for scanning and the RAM requirement of each anti-virus was noted. The system used for the test was a P IV 3 GHz with 512 MB of RAM, an 80 GB HDD with Windows XP SP2.

	Idle RAM	RAM During scan	Time
AVG Antivirus 7.5	5.34 MB	9.56 MB	0:20:09
e-Scan	4.93 MB	19.37 MB	05:27:86
Avast! 4.7	4.69 MB	5.20 MB	00:19:00
Norton Antivirus 2007	12 MB	24.74 MB	02:58:33

We should mention here that when testing we found a folder from a removable drive containing Win32:Pirate, and e-Scan just didn't detect the virus. Avast!, on the other hand, didn't allow access to the file till we cleaned it. Norton Antivirus 2007 contains a firewall and an anti-spyware built into the package, but we thought dedicated software like ZoneAlarm for a firewall and Spybot Search & Destroy for spyware do a better job, using fewer resources.

The table indicates that Avast! fared better than the other software both in terms of speed and resources consumed. The interface is cleaner, with no learning curve needed to use the software. Best of all, this anti-virus is free for personal use, making it an essential software for every system.

6.6 Spybot Search & Destroy 1.4

SS&D is designed to search for and destroy spyware. Having installed SS&D you can easily initiate a scan using the "Check for problems" button. The results would indicate the files or modules affected by spyware. They would also indicate your "Usage tracks", which are basically the files and the modules you have been working on. Spybot works in two modes—the Default and the Advanced mode. Most settings can be modified only in Advanced mode. It might be a good idea to operate at all times in Default mode and switch to Advanced mode only when you need to change the settings.

Important settings available:

- Categories of threats to be searched for
- Backups of fixed spyware and usage tracks
- Display confirmation before making critical changes
- Schedule program for auto-scan

- Schedule search on the Web for latest updates
- Ignore files, folders, and cookies in the scan

The results would be listed as entries in red and green; the red ones are those infected by spyware and are the real threat. The green ones merely indicate your usage tracks, which you might want to delete in the interest of privacy.

Next would be to take a decision on cleaning the entries. As regards the red entries, it would not be much of a decision—there's nothing really to do except than to clean them. The decision of cleaning the green ones is non-critical and lies wholly with the user as his or her personal choice.

If you have chosen to ignore usage tracks, you could simply go to **Settings > File Sets** (only available in Advanced mode) of the program and disable the “Usage tracks” entries. Future searches will not show results on usage tracks.

Once you have decided on the problem entries that need to be cleaned and those would be the entries appearing ticked in the checkbox, you are ready to use the “Fix selected problems” button. While fixing problems, be sure that none of your other applications are running.

Special Features

Clicking the Immunize button blocks malware from entering your system, providing you with the first level of security.

The “Resident” programs are applications which, once loaded, stay in memory until you do a shutdown. You can set up SS&D to load during each startup of your PC.

SDHelper

This is a resident program built to block files known to be malicious. It is checked by default during installation.

TeaTimer

While in Advanced mode, you could check the “Tools/Resident/TeaTimer” checkbox to activate this option. TeaTimer continuously monitors the processes you initiated to detect spyware, and gives you the option to:

- Be informed when the process tries to start again
- Automatically kill the process
- Allow the process to run

Additionally, TeaTimer also protects you from processes which try to make changes to critical Registry entries, by giving you an option to either Allow or Deny a change. TeaTimer would use about 5 MB of your memory at all times, if activated.

SS&D is able to list your ActiveX applications and Browser Helper Objects, which are basically extensions to IE, as legit or illegitimate. The legit entries appear in green, and the illegitimate ones appear in red for you to make a further analysis.

Using the IE Tweaks option under Tools, you can make your system safer by locking your Hosts file. This will prevent hijackers and/or other users of your system from changing your preferences.

There are a host of other features and tools, explained in the tutorials and the Help section of the program. Another essential!

6.7 ZoneAlarm

Developed by Zone Labs, ZoneAlarm is designed to protect PCs connected to the Internet or any computer network, from hackers. It works in two zones, the Internet and the Trusted zones. It allows you to share files and printers with computers in the Trusted zone, while blocking users from access to your PC's resources in the Internet zone.

The Status window provides information on the levels of protection for your PC. They would provide information like blocked

intrusion attempts to your PC, and the number of programs secured from Internet access and e-mail protection.

Preferences you can set:

- Scheduling checks for product updates (Auto/Manual)
- General options to set up ZoneAlarm to be activated on startup and protect the ZoneAlarm client
- Options to be used for maintaining contact with Zone Labs
- Online fraud protection

The Firewall acts as a guard to control all traffic to and from your computer. It allows only recognised users to access your computer's resources. It would notify you when new users try to access your PC and provide you with an option to Allow or Deny them access.

Internet Zone Security, provided in the "Main" option of the "Firewall" dialog window, has three settings. A setting of High disallows sharing of resources. This is the recommended setting for the Internet. "Med" makes your computer visible but blocks access. Recommended for temporary use in the Internet zone. Off makes you visible and unprotected.

The "medium" setting is recommended for the "Trusted Zone Security" only. This allows other computers on the network to share your resources.

Click on the "Zones" option at the top right corner of the Firewall dialog window to Add, Remove, or Edit users as "Trusted" users of your PC.

The Program Control allows you to control which applications can or cannot use the Internet. ZoneAlarm makes it mandatory for programs to ask for Internet access and Server rights by setting the control to Medium.

The "Automatic Lock" can be set to On or Off. Clicking the Custom button at the bottom right corner of the dialog box brings up the "Custom Lock Settings" dialog. You can set your computer

to be locked after a set period of time of inactivity, using the “Lock after minutes of inactivity” checkbox. Alternatively, you can also set it to lock when the screensaver activates, using the “Lock when screensaver activates” checkbox.

The “Programs” option in the Program Control dialog window provides information on the permissions granted to the programs that have tried to gain access to the Internet or to your local network. You can change permissions by left-clicking on the “X” or “?” or “Check” icons. You can also add new programs to the list by clicking on the “Add” button on the bottom right corner of the dialog window.

The Anti-Virus Monitoring monitors the anti-virus software you’ve installed on your PC, and alerts you when it is turned off or deemed to be outdated. This system works as a backup to your anti-virus warning and update system.

E-mail Protection is a supplement to your anti-virus, which is designed to keep a watch on your e-mails for any known or unknown viruses.

The Log Viewer: a log containing the details of the activities monitored (allowed/blocked) by ZoneAlarm is maintained. You can view these by clicking on the “Log Viewer” button at the top right-hand corner of the main screen. The Log Viewer provides you with an option to set the number of entries and type of alert that you need to view. The alert types are Firewall and Program. Previously blocked entries in the firewall can be given access simply by adding them to the trusted zone, using the “Add to Zone” button. The “More Info” button would provide you with detailed information on an activity such as the application that tried to connect to the Internet or some resource on the network which tried to get an access to your PC, and the way it was dealt with.

ZoneAlarm and ZoneAlarm Pro

The installation would prompt you to choose between

ZoneAlarm and ZoneAlarm Pro. ZoneAlarm is free, while the Pro version is not. All the above-mentioned features are available with ZoneAlarm, while ZoneAlarm Pro has many more levels of protection, like advanced virus and spyware protection, blocking pop-up banners and ad windows, eliminate Web site tracking devices, and more. ZoneAlarm Pro is available on a free trial basis for 15 days.

6.8 WinRAR

WinRAR is the Windows version of the file compression software RAR. It can achieve compression ratios in the order of 15 per cent or even less of the original file sizes.

A double-click on the WinRAR icon brings up the main window. The icon is automatically set up on your Desktop during installation. Select the files that you need to archive and click on the Add icon at the top left-hand corner of your screen. WinRAR provides you with different archiving options like deleting files after archiving, creating self-extracting (SFX) archives, and solid archives. The solid archive box is selected by default as it is the recommended option. The solid archive option slows down the compression and extraction but provides a better compression ratio. The 'Compression method' is generally selected as 'Best'. It is the slowest but provides the highest compression.

Advanced options

'Background archiving' allows you to continue with your work as the archiving takes place.

'Wait if other WinRAR copies are active' would make better use of your system resources if you schedule your archive or extract operations in a queued manner.

'Recovery record' a larger recovery record provides recovery

DIY

Have there been times when you wanted to split a large file to fit your CD or your thumb drive or split a file to less than 10 MB in file size so as to send a large file by e-mail? You don't have to look for a file splitter to do this; WinRAR will do the job for you. Just click the file you want to split and select "Add to archive...". A window "Archive name and parameters" pops up. Under the General tab, there is a drop-down menu under the title "Split to volume, bytes". Select the split size you want to split the file into. Note that if you don't see the desired file size in the drop-down menu, you can also specify file size in number of bytes. If you are wondering how many zeros go into splitting a large file to 10 MB file size, don't strain yourself. Just type in "10 MB". Make sure there is a single space between the integer and letter and click "OK". Voila—your large file is split into 10 MB files.

The receiver of your files, to extract and join the files, just needs to save all the downloaded files into one directory, then perform an extract operation on the first file (identified by the "part x", where x should be 1) in the archive. To be precise, right-click part 1 and select "extract here".

from more serious damages but offers poor compression. The maximum value allowed is 10 per cent, but the recommended value is 1 to 3 per cent. The option becomes available only when the 'Put recovery record' check box is selected in the 'Archiving options' of the 'General' dialog box.

'Compression' provides for further fine tuning depending on the type of files such as text, audio and images. The default settings are generally the best options and any changes might actually bring about degradation in performance.

'SFX options' allows you to set optional SFX parameters such as destination folders or window title. The option becomes available only if you select the 'Create SFX archive' in the 'Archiving options'

of the 'General' dialog box. Use the 'Files' dialog box to append or exclude files into the archive.

Select the files from the archive that you wish to extract from and click the 'Extract To' icon. This brings up the 'General' options dialog box which allows you to specify the location that you want the files to be extracted to. It would also allow you to specify the 'Update mode':

- 'Extract and replace files' extracts all selected files (the default)
- 'Extract and update files' extracts those selected files which are not present or are later than the ones present in the target folder
- 'Fresh existing files only' extracts selected files which exist in the target folder and are later than the ones in the target folder. Any file which is missing in the target will be skipped

Overwrite mode

- 'Ask before overwrite' prompts before overwriting a file
- 'Overwrite without prompt' does not prompt before overwriting
- 'Skip existing files' does not extract existing files
- 'Rename automatically' renames files before extracting if the file exists. The renamed file will be original filename plus a number and the extension if applicable. For example, "Original(1).txt".

Miscellaneous Options:

- 'Extract archives to subfolders' is available only when files are selected to be extracted from more than one archive. Files are extracted and placed in separate folders whose names are generated based on the archive
- 'Keep broken files' would basically keep the damaged files. WinRAR would otherwise delete damaged files.
- 'Display files in Explorer' opens the explorer window and displays the contents of the target window as soon as the extraction is done.
- 'Save settings' saves the settings on the 'General' and the 'Advanced' dialog boxes for future use.

‘Advanced’ options for the ‘Extract To’

- Allows users to set the time that the file was modified, created and accessed with the ‘File time’ options: ‘Set modification time’, ‘Set creation time’, ‘Set last access time’.
- Set ‘Attributes’ with the ‘Clear attribute archive’ which clears the ‘Archive’ attribute of extracted files
- ‘Set file security’ allows users to restore owner, group, access control and audit information if it was previously saved
- ‘Set attribute compressed’ would restore ‘Compressed’ file attributes during extraction.

File paths

- ‘Extract full paths’ extracts path information into the target folder along with the files
- ‘Do not extract pathnames’ causes path information to be ignored
- ‘Extract absolute paths’ causes WinRAR to extract files into their original folders and disks. Files need to have been archived with the ‘Store full paths including the drive letter’ option enabled.

Delete archive

- ‘Never’ will not allow the deletion of an unpacked archive
- ‘Ask for confirmation’ before deleting an unpacked archive
- ‘Always’ will allow the deletion of an unpacked archive

Turning off the ‘Check authenticity information’ in the ‘Miscellaneous’ checkbox can save some time when unpacking large RAR archives.

About SFX

Self-extracting archives are compressed files bundled along with the application to extract itself. It is useful when you need to distribute archives and want to make sure that the people receiving it have a means to extract them.

To create SFX archives, you need to follow the steps to create a normal archive and while doing so just need to check the ‘Create

SFX archive' check box in the archiving options of the 'General' dialog box.

The Wizard interface is a handholding exercise for beginners to use WinRAR. It allows beginners to perform basic compression and extraction operations using simple self-explanatory prompts.

6.9 Winamp 5.32

Winamp has been an around ever since one has listened to MP3 music. In fact, Winamp was the first successful MP3 player. It was developed in 1996. During that time, Winamp was only used for the MP1, MP2, and MP3 formats. Winamp did not become popular until the release Winamp 2 because of the poor interface. With the release of Winamp 2, both WMA (the proprietary compressed format of Microsoft) and MP3 could be played by Winamp. New versions of Winamp can play many audio formats like Real Audio, AAC, AC3, Vorbis, APE, FLAC, ALAC and also many video formats like MPEG-1, MPEG-2, MPEG-4, WMV, RealVideo.



Winamp is now a fully fleshed-out media management program

The Lite version is meant for portable devices and is limited in features. It can play only aacPlus, MP3, AAC, and is compatible with Winamp plugins.

Skins change the way Winamp looks. You can choose a simple user interface which hides certain parts of the player like the playlist and graphic equaliser, or make it look jazzy.

You can find the latest version Winamp 5.32 under Essentials in

our CD, or download it from www.winamp.com/player/free.php. There are four versions of Winamp available—Pro, Bundle, Full and Lite. The Pro version is a paid version and allows you to rip CDs to MP3 and to aacPlus, AAC, and WMA at unlimited speeds, and burn CDs up to 48x. The Bundle version and Full version have the same features, but in the Bundle package, an MP3 song is thrown in.

A typical Winamp instance features a play window, playlist editor, and media library. The player window allows one to play, pause, stop, skip to next song, shuffle playlist and repeat the songs in the playlist. One can open a window to view video or visualisations. With visualisations, you can enjoy graphics synchronised to the music. The interface can be shrunk to fit the toolbar.

We haven't really spoken too much about Winamp here because we figure everyone already knows about it! You can also read more about it in the Chapter 3 of this book.

6.10 Foxit Reader 2.0 Build 1316

Foxit Reader is small software—1.5 MB—which allows one to read PDF documents. Typewriter, a tool in Foxit Reader, allows you to add text anywhere in a PDF document, though you cannot save the text until you buy the paid version. You can still take a printout of the added text. The Snapshot tool on the toolbar allows one to copy a selected area from the document to the clipboard.

You can change the background colour of the PDF document using Preferences... under the Edit menu. Document colour options allow you to replace document colours or set a custom colours both for the background and the text. “Forms” under Preferences allow you to highlight fields like checkboxes, drop-down menu, text fields...

You can also change the opacity of the highlight. Page dis-

play allows you to change the page layout of the displayed page either to single page or continuous, facing, and continuous-facing. You can also set the page layout to custom facing and custom margins, and set the text as optimised for LCD screens. You can set the resolution of snapshots taken according to the default resolution of the PDF document or customise the resolution.

Not too big on features, Foxit Reader is just a lightweight PDF reader, much lighter than the bloated Adobe Reader.

Commute Computing



Computing on the move is the new mantra, and mobile software is what's enabling it. Whether it's a simple cell phone, a smart phone, a PDA, or even a laptop, today it can help you compute on your commute. In this chapter, we will look at some of our favourite freeware software that help you stay productive, or just entertain you, on those long journeys.

As little as a couple of years ago, mobile software was a niche category, and software developers weren't really targeting this segment much. Today, however, with almost everyone owning a phone that's capable of running Java apps, there's a lot of good and useful mobile software out there. It's a pity that most software targeted for this new audience is paid, but as the segment gains popularity, you can expect the open source movement to make an entry here, and also more freeware being made available. That said, let's look at some of the coolest freeware we could find for your mobile.

7.1 Mobile Managers

Every mobile manufacturer usually bundles a copy of their mobile management software. These are popularly called PC Suites, and give you the power to back up your phone's memory, add/remove contacts, and do a lot more. These are generally made available to a customer when they buy the phone, or when they buy the USB connector.

Most phone manufacturers offer a free PC-phone synchronisation software for free download on their Web sites, and we're only going to be looking at the ones from Nokia and Sony Ericsson, because they are the most popular here in India, and we got many letters from readers asking for tutorials on the updating process of these two. For those with other phones, just visit your manufacturer's Web site, download the requisite software. Even the updating process for other phones is almost the same as described for Nokia and Sony Ericsson.

7.1.1 Nokia PC Suite

Nokia's PC Suite allows you to connect your phone to your computer via either Bluetooth, infrared, or via the usual USB connector. Obviously, it's best that you connect using the USB connector in order to speed things up! You can back up all your phone files using the PC Suite (PCS), and later restore them if your phone

starts acting up. Regular tasks such as synchronising data between PC and phone—events, to-dos and notes—becomes a snap using the PCS. If your phone is a smart one, you will also be able to synchronise all your Outlook data between your phone and PC so that you always have access to your e-mails no matter where you are.

You can manage your phone memory as well as any external memory cards you've added. Add or remove music, video, ringtones, etc., in a jiffy by using Nokia PCS' file management capabilities. If you're into gaming, or need to install Java applications, you can copy them to the phone from the easy-to-use PCS interface.

Apart from this, while connected to the phone, you can read all your SMSes on the PC and even write and send new ones using your PC keyboard instead of fumbling with the phone's tiny keypad. If you have a camera phone, PCS will help you synchronise your photos, so that every time you hook your phone up to the PC, all new images are backed up on the PC's hard drive. No more losing pictures of that dream vacation just because you pressed a wrong button on your phone! If your phone supports GPRS/EDGE, you can connect your PC up to the Internet easily by using the Nokia PCS to manage the connection.

Another important and new aspect of Nokia's latest PC Suite is the ability to flash your own firmware—you can upgrade your phone's software to the latest version using the Nokia Software Updater that works with Nokia's PCS. If you have a music phone, the software will integrate well with Microsoft's Windows Media Player 11 (WMP11), creating sync-playlists which you can update on your PC; then just connect your phone and the songs on the phone will be updated according to the changes you made to the WMP11 sync-playlist.

Overall, though there are other third-party software that claim to do a better job than Nokia's PC Suite, we really cannot understand why anyone would need any more features than those already present. Besides, Nokia's PC Suite is freeware, and is made

by the same company that made your phone, so if you have a Nokia phone, make sure you try PC Suite before anything else!

Updating Firmware

What was once a task that required you to visit a service centre, wait in a queue for hours, and then another hour for your phone to be “flashed,” is now a job you can do at home on your own. Flashing, or updating your Nokia phone’s firmware, just got a lot simpler thanks to Nokia’s Software Updater. This is a software tool that runs on Windows in conjunction with Nokia’s PCS, downloads the latest firmware to your PC, and then updates your phone via the USB cable.

If you have Nokia PC Suite installed, just go to www.nokia-asia.com/nokia/0,8764,96197,00.html, choose your phone model



Using Nokia's PC Suite, you can update and sync your Nokia phone, and much more...

and follow the on-screen instructions. These may differ based on your phone model, but you can take the steps mentioned below as a rough guideline to updating your phone.

1. Make sure your phone is fully charged, Nokia PC Suite is installed, and for safety, keep your phone charger on and connected to the phone for the duration of the update. Your PC configuration should be at least a 1 GHz CPU with 512 MB of RAM, preferably running Windows XP and with a fast and reliable connection to the Internet (256 Kbps, always-on is fine).
2. Back up everything! After you flash your phone software, you might find that all personal data has been erased, similar to using the restore factory defaults setting in most phones today. Use the Nokia PC Suite to backup *everything*— all the data in your phone as well as memory card, such as contacts, messages, call registers, ringtones, themes, music, videos, etc.
3. Download the Nokia Software Updater from the site we mentioned above, choose English as the language, and save it to disk.
4. Before you run the utility, make sure you have an hour to spare; the process, once started, cannot be stopped.
5. Run the Software Updater; it will prompt you to back up your phone data. If you haven't, do so. Click Start after you have used PC Suite to back up everything.
6. Connect your phone via USB to the PC; from the update modes shown, select Nokia PC Suite. Click Next.
7. The Software Updater will connect to the Net and search for the latest firmware version for your phone. When it finds the update, it will again warn you about backing up data, and ask for your acknowledgement by asking you to tick a checkbox. Click Update.
8. The firmware will be downloaded, during which you are allowed to Cancel the download. After the download is finished, the Cancel option is greyed out and you have no choice but to wait while the phone is updated.

Caution

Make sure you don't trip over the USB cable or PC power cable. If you disconnect the phone (or accidentally switch off the computer) while the update is in progress, your phone will be rendered useless, and even though Nokia may cover this under warranty, you will have to do all the running around to get the phone fixed! Also remember that during the update, PC Suite will report the phone as disconnected, so don't panic and start fiddling with USB cables if you see this message!

9. Restore the backup you took using the Nokia PC Suite.

10. Sometimes, you get an error message that says the update has failed. Don't worry—just switch off your phone, remove the battery, put it back and turn on the phone. Check the software version, and if it's new, the update actually worked.

7.1.2 Sony Ericsson PC Suite

Just like the Nokia PCS, the Sony Ericsson PC Suite (SEPCS) is software that you should have if you own a Sony Ericsson mobile phone. Most of the functionality is the same as what Nokia has to offer in their PCS: you can back up and restore phone as well as card memory, add or remove data such as multimedia files, ringtones, etc. You can install Java apps to the phone, and SEPCS is necessary if you want to synchronise your Outlook data, music, or pictures between the phone and PC.

Apart from all the regular stuff, SEPCS also offers a connection manager that will let you set up a PC network connection to connect to the Internet using your phone's data account (GPRS, EDGE, etc.). Just as with Nokia, the software update utility is a separate download, and combines with the SEPCS to give you a backup, restore, and firmware update solution.

Instead of repeating the capabilities of the SEPCS, which is very similar to Nokia's PCS, we'll get straight into the firmware update procedure.



Sony Ericsson's PC Suite has a clean and simple interface

In order to update your firmware, we suggest that you download the latest version of the Sony Ericsson PC Suite and the Sony Ericsson Update Service utility, which are about 40 MB and 23 MB downloads respectively. We've provided the latest versions in this month's DVD, but if you plan to repeat this procedure in a few months (as you should, to keep your software up to date) make sure you get the latest version of the Update Service utility—the SEPCS will keep updating itself automatically.

Here as well, you should have a fully charged phone, at least a 1 GHz CPU, 512 MB of RAM, and we recommend Windows XP (Home or Professional) as the operating system. You should also have the USB cable that comes bundled with your phone (if not, you will have to get yourself a USB connector that's compatible with your phone).

After you have installed the latest version of the SEPCS and the Update Service utility, restart your computer once. Then just click on the Update Service shortcut on your Desktop and follow the instructions provided on-screen. You need to have Internet Explorer 5 or later and Flash Player 7 or later installed to be able to see the on-screen instructions.

Most new Sony Ericsson phones have updateable firmware, and the general procedure is as follows.

1. Turn off your phone, and remove the battery and the SIM card. Replace the battery (without the SIM card).
2. Start the SE Update Service. It should ask you to agree to a few terms and conditions, and remind you to make sure that you are connected to the Internet and have a full charge on your phone.
3. Keep the [C] button ([Clear]) on your phone pressed (or whatever button the Update Service asks you to), and then connect the phone to the PC via the USB cable. Keep [C] pressed until the Update Service tells you to let go.
4. If you get a "Found New Hardware..." message from Windows (a device called "USB Flash" may be found), let it search automatically online for drivers. After the USB Flash drivers are loaded, disconnect your phone, switch it off again, then hold down [C] and reconnect it to the PC.
5. When the Update Service tells you to let go of [C], do so. Click Next and follow the on-screen instructions.
6. As usual, make sure you don't trip over any cables and cause the phone to disconnect from the PC, or switch off the power. Don't touch the phone till the Update Service tells you to disconnect your phone.

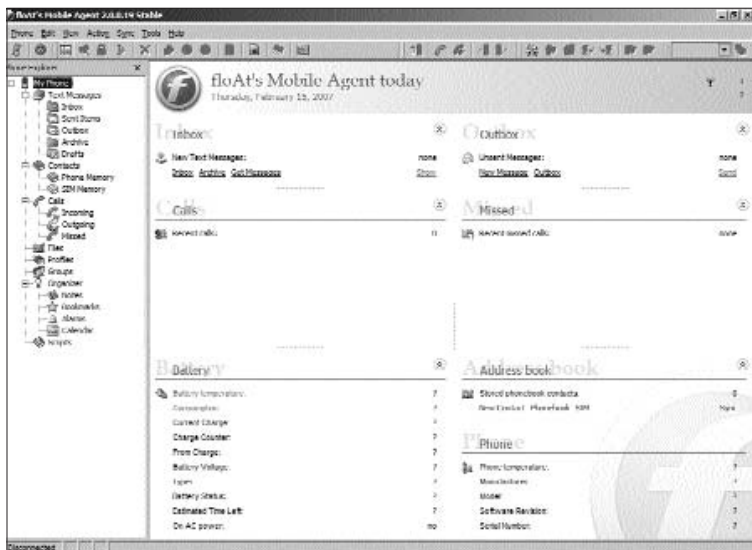
As you can see, firmware flashes have become quite simple, thanks to good software and support from most major manufacturers. However, enough of the branded software; let's take a look at an open source mobile management software that will really let you tinker with your phone.

7.1.3 floAt's Mobile Agent

At under 4 MB, floAt's Mobile Agent (FMA) is a refreshing change from the rather bulky PC Suites that other mobile manufacturers dish out. If you're a coder, you'll love FMA even more, because it's open source, thus giving you the freedom to download the source and tinker away, trying to create your own crazy scripts for your phone.

floAt's is based around Sony Ericsson phones, so those who own other brands might have to wait a while before trying out this cool software. In fact, it's so cool that some of our readers have reported opting for Sony Ericsson phones just so that they can continue to use the cool functionality that floAt's offers!

Let's get started: you can get the installer from this month's DVD, but in case you want to go and check for updates, or prefer to use the latest beta version, visit <http://fma.sourceforge.net/> and download the version you want. Install FMA, and start it up. Plug in your phone, or use IR or Bluetooth to connect it to your PC.



floAt's Mobile Agent is like a mobile PC Suite on steroids—so many options!

During installation, you might be asked to download a few files from Microsoft to support scripting.

As soon as you launch FMA, you are greeted with a screen that shows you all the details of your phone: everything from who called last to who SMSed last. You can make a new call, receive a call, send SMSes, be notified on-screen when you get a message, browse through your phone memory as well as your SIM memory, and sync your personal data from Outlook (especially mail, calendar, and your organiser).

Where it becomes interesting is when you get to the scripting...

Thanks to FMA, you can use your SE phone as a remote, controlling various programs via Bluetooth. You can control the mouse pointer on your PC, along with the following software: BSPlayer, iTunes, Windows Media Player, Media Center 9, Media Player Classic, VLC Media Player, WinAMP, WinDVD, WinTV, MS PowerPoint, PowerDVD, Zoom player... you get the idea!

Just go to **Tools > Script Configurator**, check for the default list of scripts there, and see which ones interest you. You will also need to come to this settings box if some of your scripts just do not seem to work! This is often because the program you're trying to control is just not installed in the default location. You can update the location of the EXE that FMA asks you for a path to.

Overall, with nifty little features, an unbeatable price (it's free!), being open source and making life so much simpler is what makes FMA a great software. If the FMA developers are to be believed, they claim to be working on FMA for various different manufacturer models, so non-Sony-Ericsson phone owners might be rejoicing too!

7.2 Applications

The days when a mobile was just a portable telephone are long gone. It's the information age, and boy, do we want our information *anywhere*. With mobile data connections available across the country, no matter which service provider, it's no surprise that we need Internet tools for our mobiles to do pretty much what we're used to when we're using a Desktop PC. Here we'll look at some software that will help you stay connected while on the move, and keep the experience as close to a "Desktop" as possible.

7.2.1 Opera Mini

A lot of Net addicts swear by a particular browser, and quite a few of us Indians prefer the Opera browser to anything else. Now there's a huge fight for the desktop PC browser segment, with Microsoft's Internet Explorer 7, Mozilla's Firefox, and Opera battling it out.



Opera Mini in action
on mobile phones

Basically, Opera stands third in a race that has only three major players. However, when it comes to mobiles, other browsers can't hold a candle to Opera Mini—Opera Software's miniature version of their browser that's optimised for mobile devices.

Small-screen rendering has always been a cause for concern, and with better technologies available to connect mobile users to the Net using HTTP instead of WAP, the need for a good browser is obvious. Opera Mini is head and shoulders above everything else that's currently available.

Apart from the brilliant rendering, Opera Mini has everything you'd need right at your fingertips (literally!), including a feed reader to subscribe to your favourite RSS feeds, Bookmarks, History, and Yahoo! and Wikipedia search bars. What's great about Opera Mini is that it uses Opera's servers to download and correctly resize full HTTP pages to fit to the smaller screen, so you end up getting better browsing speeds as well as better rendered images and text.

If you access the Internet from a mobile device, head over to www.operamini.com and download the latest version for your phone model. This is a must-have!

7.2.2 Flurry

There are many applications that offer access to your e-mail on the move, but we really liked Flurry. You can get the application at www.flurry.com. You have to sign up for an account and then add your e-mail address and password (the one you use to access that e-mail account), and then install the Java installer file to your phone. Now just run the application



Get e-mail anywhere with Flurry

and you will receive your mails. It's simple, no hassles, and it will just work! This is part of the reason why we love it. It also works with most phone models, so long as you have Java support and a data connection.

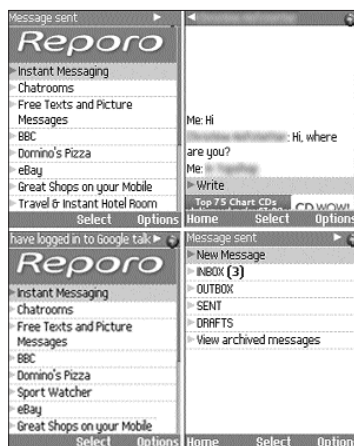
7.2.3 Reporo

If you're a chat addict, and start having withdrawal symptoms three minutes after you leave your PC, this is one mobile utility that will make your day! Reporo (www.reporo.com) is a tool that will let you sign in to multiple instant messengers, including Windows Live (MSN) Messenger, Yahoo! Messenger, Google Talk, ICQ, and AOL Messenger. All you have to do is go to www.reporo.com, sign up for an account, and add your IM details, and they will send you the installer for your phone. Obviously, you need to have a data connection in order for this to work.

Reporo features a tabbed interface, so you can multitask and switch between accounts. Reporo also claims to be dynamic, so you automatically get access to new services when they are available—of course we haven't seen a service added yet.

Apart from instant messaging, Reporo also supports text and picture messaging, but instead of using the service provider's network, it uses the Internet. What this means is that if you have friends or family anywhere in the world, you can text- and picture-message them without paying the expensive SMS or MMS charges.

Reporo also features chat rooms across the globe for social networking. Most people seem to be using this service as a way to



Reporo in action

flirt or find dates, but then again, maybe it's just what you've been looking for!

Even for those with pay per MB (or KB) Internet access plans, Reporo helps keep your bills down, because of the compression and optimisation tools that Reporo's servers use. So an entire IM conversation would cost less than an SMS or MMS. If you're on a time-bound Internet access scheme, Reporo might not be a good idea, however.

Using the instant messenger services was as easy as can be, and we found it to be a lot easier to use than most of the other mobile IM client we looked at. The tabbed browsing (using different screens for IM conversations, friend lists, and software settings) means you can use your mobile joystick's left and right movements to quickly switch windows.

Apart from these features, there are additional options such as News (General, Sports, Music, etc.), Horoscopes, Update yourself with your eBay auctions, Order Pizza from Domino's, etc. Most of these additional services are UK-specific, but we can hope that these services become available in India later.

Overall, if you're into IM or chatrooms, get this software!

7.2.4 Plato Video to 3GP Converter

If you have a mobile with a rather large memory card, you might be tempted to load movies or video clips. Most new mobiles are capable of playing 3GP video files, but you have to convert your movies to this format. The easiest way to do so is to get Plato Video to 3GP Converter.

This software has a low system requirement, and will run well on any PC that has a 1 GHz CPU or better, and 256 MB or more of RAM. We used an older AMD Athlon 64 3000+ with 1 GB of DDR RAM to convert an hour-long TV episode to 3GP with AAC audio to a resolution of 176 x 144 @ 15 fps with stereo audio, and it took



Plato Video to 3GP convertor makes it easy to watch movies on your mobile phone

us less than three minutes! You can convert entire movies in a matter of minutes.

All you have to do is install the software, then run it and click on the plus (+) sign on the lower-right to add the file you want to convert to 3GP. Now select the output type settings, which is based on your phone's display resolution—it only provides options between resolutions of 320 x 240 and 176 x 144, which are the most popular. Choose the option that is closest to your phone's screen resolution.

If you only want a part of the movie clip, instead of ripping the whole movie, you can convert just a part of it. Just drag the start and end slider of the preview window at the top left corner to the positions you want to start and end converting, and then click the big yellow Start button at the bottom right.

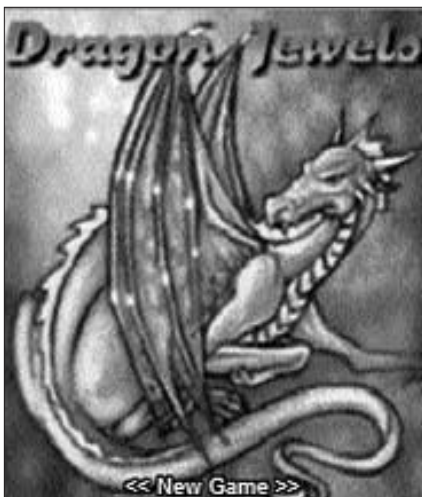
There's nothing much else to say about the software, because it just works, and does so easily without any fuss. In fact, this simplicity of use is what made us include this software here.

7.3. Games

PC gamers may not like the fact that more people have played *Snake* on a Nokia phone in India than any other PC game (*Solitaire* might be an exception!). The fact is that though mobile gamers may not take their games as seriously as some of the PC gamers do, you can bet that we all love to play little, addictive games when we're bored. Now whether that boredom hits you on your commute to work, as you lie in bed waiting for sleep, or during that boardroom meeting/presentation that no-one is really paying any attention to, there's only one device in all scenarios that can allow you to unwind with a game—your cell phone! Here we'll take a look at some of the best freeware Java games for mobiles. If you want to add to this list, please write in with your opinions to readersletters@jasubhai.com, and we'll include them in future issues for the rest of our readers. All these games can be found on this month's *Digit* DVD.

DragonJewels

If you loved Tetris, you'll love this game. It's a Tetris-like game, but instead of matching shapes to fill gaps like in Tetris, you have to match colours of jewels. Get three colours in a row and they are removed. The controls couldn't be simpler: left to move the



DragonJewels is a tertilis-like game

falling jewel left, right for right, and the fire button (joystick button, [5], or centre button) to drop the jewel in place. It's simple, it's mindless, and yes, it's addictive—especially when you have nothing better to do.

Zelda

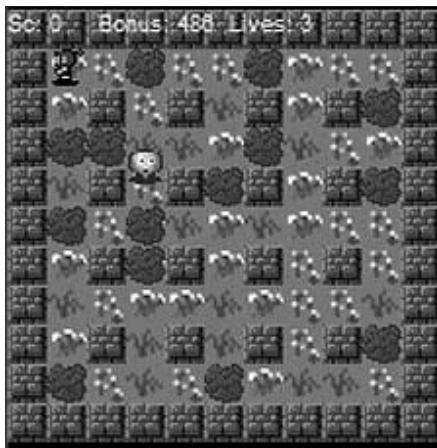
If you haven't heard of *The Legend Of Zelda*, you need to get your video gaming history right—do a quick Web search, read about the cults that the original game created, then come back. Now you can be a part of the Zelda-mania, and you can play it on your phone. This game is being developed independently, and isn't done yet, but you can visit <http://zeldamobile.gorthwogh.net/> to find out more. For now, install it on your phone and enjoy!



Remember Zelda?

Bomber

Another very popular game from the video game arcade days was Bomber Man. You were the Bomber Man, who planted bombs (duh!) and killed weird-looking alien beings in the fire that spewed out of your bombs. You find treasures, you find power-ups, you find an exit out of the room you're stuck in.

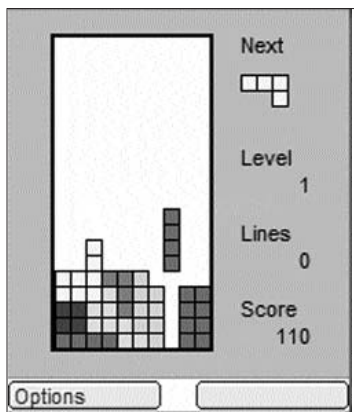


BomberMan clone for your Java mobile

Bomber is a clone of Bomber Man for your phone, and all you have to do is break the obstructing stones and kill the funny-looking aliens. Instead of finding a way out of the room, just fry all the aliens using your bombs and it's level-up time!

Yet Another Tetris

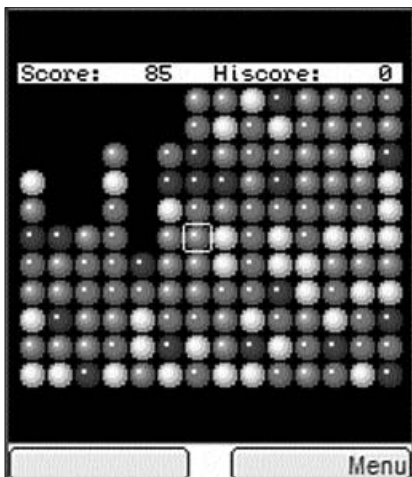
Tetris needs no introduction. It's simple, it's addictive, and it's now on your phone! Be prepared to miss a lot of deadlines, because the randomness of the pieces you get make every game different from the other. We're currently all competing for top scores! One good feature of this mobile version is that you can customise your keys, so you're never uncomfortable playing it.



Yet Another Tetris—Classic fun!

SameGame2

If you like games, but cannot concentrate for more than two minutes at a time—or maybe you have no more than two minutes free at a time—this is the game for you! SameGame2 is a puzzle game where you have various coloured orbs stacked on top of each other. You have to remove stacks of similarly-coloured orbs (two or more orbs of the same colour touching each other) and try and finish them all off. You get points for removing large



Warning: SameGame2 is addictive!

stacks, and that's where strategy comes into play. You get bonus points at the end as well, depending on how many orbs you left behind (when there are no moves left), and a huge bonus if you manage to completely remove them all. Very addictive, very simple, and very fast! A recipe for success, and the perfect mobile game, some would say.

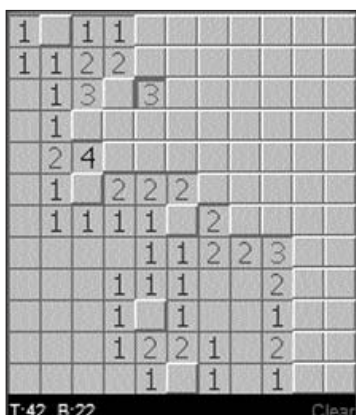
Wordsnake AD

This game is free, but bugs you with a few advertisements. All worth it in the end if you're a sucker for word games! Your task is to build words from a jumble of random letters, score points and complete the level before you run out of time. There are a lot of other complications as well, and you require strategy as well as a good vocabulary if you want to get anywhere with this game.



Wordsnake AD is like extreme Scrabble

As you make new words, the Wordsnake grows. Older tiles are removed, but if all of them go, your Wordsnake perishes and it's Game Over! You can place letters on special tiles to get bonus points, or increase the time that you have to finish each level. The game connects via your data connection to download ads—they're tiny, but if you're addicted, it will all add up for those who pay per MB or per minute.



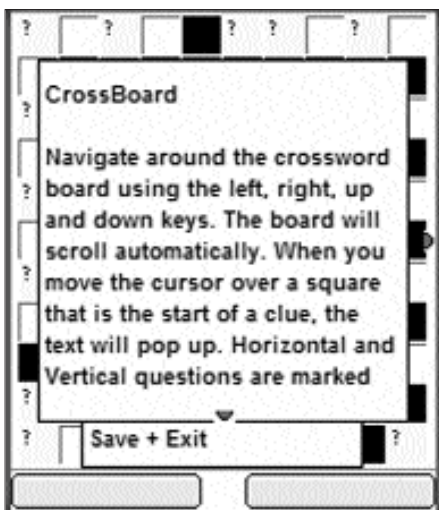
BombSweeper: Minesweeper for mobiles

lotec BombSweeper

Some of us love Windows' *Minesweeper*. Others are left scratching their collective heads at it. Well, if you're one of the thirty people in the world who actually likes and understands *Minesweeper*, here's a nice way to make sure you can show off your intellectual powers to those who care: install BombSweeper! This is a *Minesweeper* clone for all java-enabled mobile phones, and should keep you occupied. The sad thing is that cell phones don't have mice, so you can forget about trying to beat your PC time with this game. If you understand *Minesweeper*, this game is for you.

CrossBoard

Tired of fighting for the newspaper in the morning? Does everyone in the house want to do the daily crossword? Well, now you have a freeware game that can solve everyone's problems: CrossBoard is a crossword game developed by Jinjatech (www.jinjatech.co.uk) and comes with one board. You can connect to the Net if you have a data connection and download more boards.

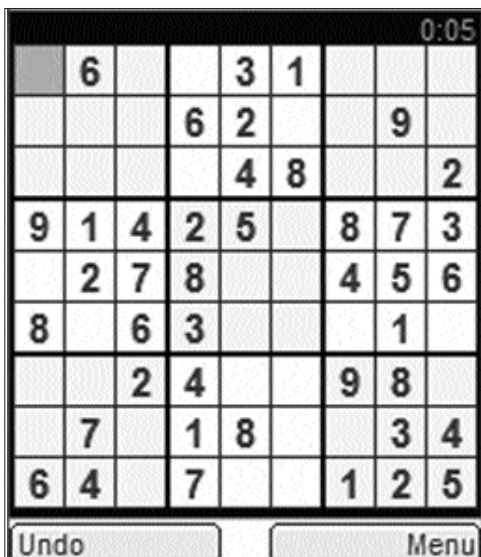


Crossword lovers rejoice!

These should keep you entertained for a while. Later, if you want, you can even pay and subscribe to bigger and better board packs. For general purposes, though, the freeware version is good enough. The "boards" are not easy, mind you, so don't expect it to be as easily solvable as most daily crosswords, but CrossBoard will undoubtedly help you improve your crossword skills and vocabulary. Clues are displayed as pop-ups, and you can find the solutions (if you get stuck) at the developer's Web site.

SUDOKU+

Let's face it—the world has pretty much gone Sudoku-crazy. Everyone's playing it, winning prizes for finishing the puzzles the fastest, and don't be surprised if it's part of an aptitude test at your next job interview! You might as well succumb and get addicted, and what better way than to install it on your mobile phone? SUDOKU+ is free-

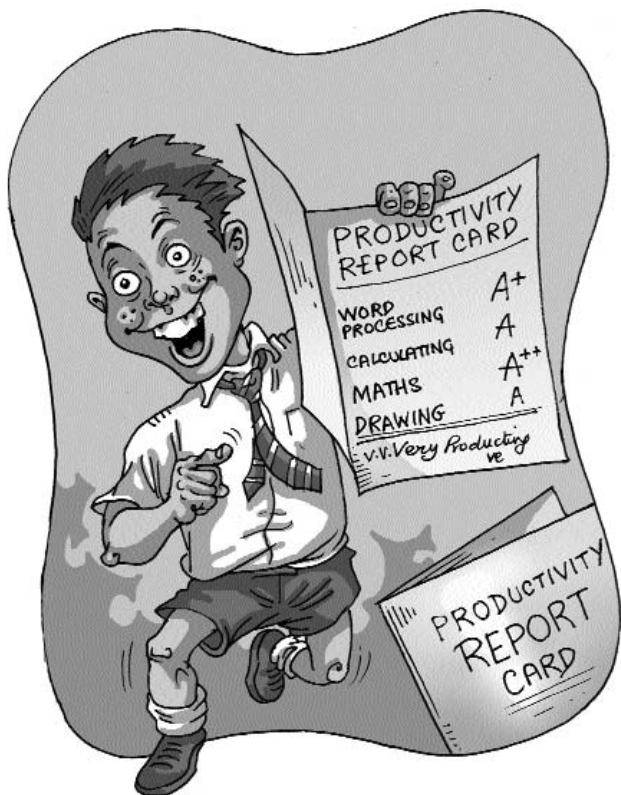


Sudoku+ gives you the world's favourite brain game on your phone

ware (at least for the easy level of gameplay) and randomly generates puzzles every time you start the game, thanks to a mathematical algorithm. You can also create your own Sudoku puzzles, or use this as a puzzle solver when you're stuck! It's got a timer, so you can compete with yourself, and also provides hints and will show you where you've gone wrong when you ask for help.

With customisable colour themes, you can make sure that the board matches your phone's theme. Enough said; install it and start Sudoku-ing already!

Productivity Tools



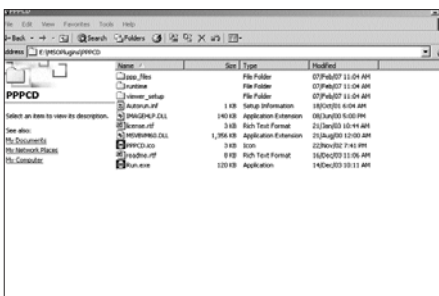
There are two aspects involved in getting productive—having the right attitude and getting the right tools for the job. While no software can do anything about attitude (not yet, anyway!), we review some productivity-enhancing tools we think you will love. There are some old workhorses here like the latest version of OpenOffice, but we also take a look at some not-so-popular but powerful tools that can give your productivity a quantum leap. All for free of course!

PowerPoint Auto Run CD (PPPCD 1.51)

<http://tinyurl.com/2fksjk>

If you want to share and distribute PowerPoint presentations on CDs without worrying about whether your recipient has PowerPoint or not, the PPPCD is the software to use. The only hiccup is that the process is not automated—no Wizard interface to guide you through the steps. You will need to manually prepare the files and then use a CD burning software to burn the files. Ignoring this minor obstacle, the result is just as professional as any other.

To get an autorun CD, do the following. Install the application to your hard drive, preferably in the same folder where you store your PowerPoint files. A folder called PPCD will be created. Inside, there will be a sub-folder called ppp_files. Open that sub-folder and delete the existing show.ppt or show.pps files. Copy your presentation file (.ppt or .pps) to this folder. Next rename the file you just copied to show.ppt or show.pps. For example, if your original filename was mypresentation.ppt, after copying it to the ppp_files folder, rename mypresentation.ppt to show.ppt or show.pps as applicable. Finally, burn all the contents of the PPCD folder to a CD and send it on its way!



Build an autorunning PowerPoint presentation

Do *not* edit any of the other files or directories. If your recipient does not have PowerPoint on his computer, he will be prompted to install the PowerPoint 97 viewer. For best performance, save your presentation in PowerPoint 97 format. Avoid using graphics and animations that are not supported in the 97 version of PowerPoint.

AbiWord 2.4.6

www.abisource.com

AbiWord is a small, compact, free, open source word processing application that could well take the centre-stage for your word processing needs. It has nearly everything that both the novice and advanced user could ask for. For all its features, the setup file is just over 5MB, and if your primary work is with Word documents, then you might well consider switching from MS Word and OpenOffice.org.

The user interface is pretty much similar to what you would find in other applications in the same class, so there is not going to be any deep learning curve to get productive with this software. For non-English usage, the drawback could be the lack of support for Indian languages, but as an English word processor, this is a solid, dependable workhorse.

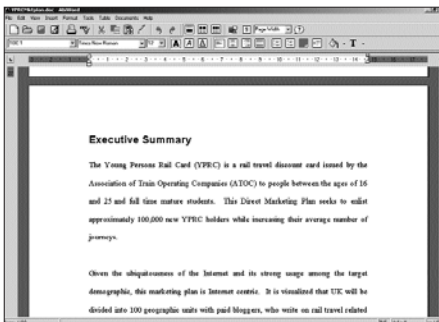
All the menus are laid out in a way that will seem familiar, so clicking on any will not spring any surprises or new, unfamiliar features. There are, of course, some nomenclature variations: Styles (in MS Word) is known as Stylist. The focus, it would seem, is to minimise the confusion for those transitioning from other word processors.

A unique feature you normally don't find in word processors is the use of plugins. There is a good collection of plugins that extends the functionality of AbiWord. These allow users to do things like select text from within the document and search for it online using Google; another plugin does the same thing for Wikipedia, and yet another translates selected pieces of text using the online translation site BabelFish.

The grammar and spell checkers may seem a bit primitive: many common words recognised by other word processors aren't there in AbiWord's dictionary. Also, the lack of a readability checker can be a source of discontent. However, the online Text Analyser at UsingEnglish.com's Web site

(<http://usingenglish.com/members/text-analysis>) is more than sufficient to perform this function.

The only disappointment is that active development of this project has slowed down considerably. The last release was in October 2005, but there is still an active and loyal user community. Institutions and organizations are still interested in deploying AbiWord. The major benefit other than being free is its easy portability across platforms—that is, the same application with very little changes can be used on both a *nix (UNIX, Linux etc.) systems as well as on Windows.

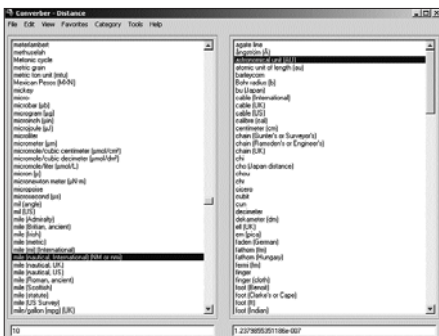


AbiWord—Lightweight Word Processing

Converber 1.5.0

www.xyntec.com

Converber is an almost universal unit conversion software that can instantaneously tell you the conversion between any two units: 1,173 units grouped in 32 categories. Converber also has a conversion editor with which you can update the conversion figures for any of the units. Use this option with caution though, and double-check your figures both from the original source as well as while you are entering



Converber—Comprehensive Conversion

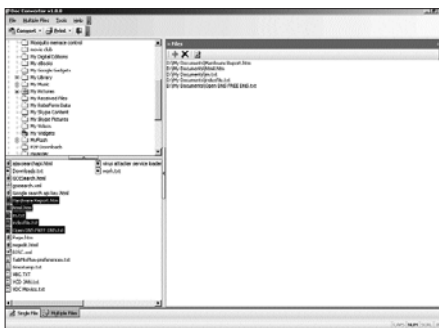
the new values. A mistake once made will be extremely difficult to trace back!

You can use the Options menu to define decimal precision and the significant digits used for exponential numbers. If you find that the list is overwhelming to scroll through, you can reduce it by selecting to view only common units, from the View menu. This will reduce the list of displayed units somewhat. There is also a useful Add to Favourites option to where you can add your frequently-used conversion units.

Doc Converter 1.0.0 (Beta)

<http://tinyurl.com/2g6wa6>

Doc Converter is a little application that sits in your system tray and converts any of your text files and developer source codes into multiple formats. This is a simple and straightforward application with no frills. One useful feature is that it can perform batch conversions of multiple files.



DOC Converter—One step batch conversion

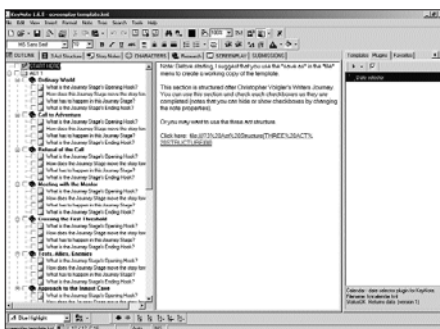
KeyNote 1.6.5

<http://www.tranglos.com/free/keynote.html>

KeyNote is a note-taking and outlining application that uses the familiar but powerful tree structure to order your thoughts. This is one step above sticky notes and becomes truly useful when your notes run into tens and even hundreds of disjointed thoughts.

The application is slightly dated and this can be felt in the occasional clumsiness of the interface. However, this is a minor inconvenience and still doesn't detract from the beauty of the program.

Users need not maintain separate files for their notes. Everything a person wishes to take notes about can be stored as a single file. Additionally, to protect your files from being opened, you can encrypt the data using the industrial-strength Blowfish or IDEA encryption ciphers.



KeyNote—Three dimensional note taking

How you organise your notes is entirely up to you. You can group your notes in tabs, and each tab can contain a hierarchy of notes arranged in the tree sub-tree structure with no technical limits on how deep your sub-tree branch goes. Each “node” in the note structure, as it’s called, can be used to write your notes in the centre pane, which is a rich-text editor supporting many text formatting functions. If you find the tree structure too complex, just use a single node to free-wheel out your thoughts as they come. There is a search function you can use later to find out what you typed where. KeyNote is integrated with WordWeb (look later in this chapter for more details), a free dictionary/thesaurus program that enables you to check your spelling as you work.

There is strong support for keyboard shortcuts, which feel extremely intuitive and simple to use. For example, a node is added by just hitting the [Enter] key, and a child node is added by holding down [Shift] and hitting [Enter].

KeyNote can run at system startup and sit minimised to the Tray. It has a configurable hotkey that will launch the program. Many users can share KeyNote on the same computer, with independent, personalised settings for each user. The flexibility is further extended in many directions—a configurable interface,

import/export of plain text and RTF, merging two KeyNote files, linking nodes to external URLs or files, drag and drop operations, and much, much more. It also has a plug-in feature that can extend the functionality to things like searching Google for selected text.

You can get started straightaway by just following the visual cues the application gives, and learn as you go. Once your curiosity has been whetted, go to the Web site and download and use sample templates and plugins for many different things: from Personal Information Management to Address Books to even Movie Writing Scripts. The only limitation is how much you can extend your imagination to discover new uses for it.

PDFCreator 0.9.3

<http://sourceforge.net/projects/pdfcreator/>

The Portable Document Format (PDF) is by far the most popular document distribution format there is. For professional-looking, non-editable documents that can be opened on nearly any operating system, in exactly the same format, PDF is hard to beat. The standard way to create PDF documents is to use Adobe's expensive Acrobat software. If you are willing to accept a small quality loss, there are many viable freeware alternatives.

PDFCreator is a simple and easy-to-use PDF maker for Windows. It installs as a printer, and almost any application that supports printing can print directly to PDFCreator. To print PDFs it uses the GhostScript application suite, which is an interpreter for Adobe Postscript and the PDF format. PDFCreator can be associated with .ps (postscript) files to manually convert them to the PDF format. PDFCreator also supports some level of protection for your output PDF document: you can disable printing and copying of text or images, and disallow modifying the document. You may also password-protect the file using up to 128-bit encryption—supported by Adobe Reader 5.0 and above.

PhraseExpress 3.1.6

www.phraseexpress.com

PhraseExpress is one incredibly useful program for those who spend a lot of time typing repetitive text. Example, if you write many official letters or formal e-mails where you begin with “Dear Sir/Madam” and end with “Sincerely,” then PhraseExpress can reduce your time typing out these words to one or two keystrokes. Of course, that’s just one example. Other uses also exist. Like using multiple signatures with Gmail—maybe to distinguish between official mail and personal, or maybe even just to specify your mood!

The program is pretty intuitive. Be warned, though, that during the installation process you may be asked if you want to upgrade to version 4. Click No for now, as version 4 is still in Beta—unless, of course, you are a passionate beta tester who likes to risk trying out unstable beta releases. When installation completes, it prompts to show you a tutorial page, along with launching PhraseExpress before you click on the Finish button.

PhraseExpress sits in your system tray and monitors your keystrokes for actions that it recognises. It is very well-documented, and all you need to do is spend about five to ten minutes reading through the tutorials or watching the demo videos to get a hang of how to get productive with it. PhraseExpress primarily relies on the keyboard to transfer the complete phrase to your target program. One feature we really liked is its ability to work even when the target program blocks clipboard access. In such cases, it will mimic keyboard entry which, even if relatively slower, still gets the work done faster than your manually typing it!

PrimoPDF 3

www.primopdf.com

Like its open source cousin PDFCreator, PrimoPDF is free and simple to use. Not surprisingly, PrimoPDF also installs itself as a printer driver. In any printing-capable application, simply select the PrimoPDF printer, configure your printing options, and fire away! The printing options cover all the usual security and quality fea-

tures that you've come to expect when printing a PDF document. A simple six-page PDF tutorial (see activePDF under **Start > Programs**) is also installed, which you only need to speed-read through to get to know all the features.

The Document

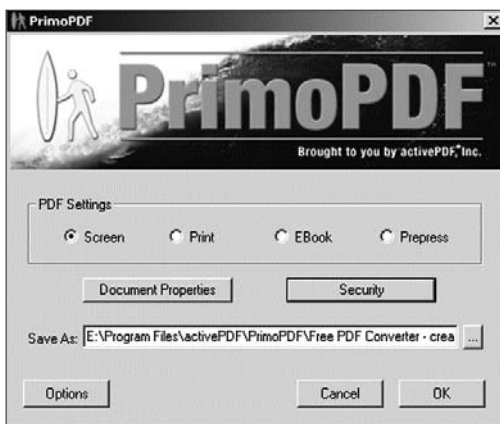
Properties feature is a nice touch. You can use it to input additional information regarding the document. Normally, most people ignore Document Properties, but entering relevant data in these fields can make it more search engine friendly—either a Web search engine or a desktop search engine like Google Desktop.

tinySpell 1.5

<http://tinyspell.m6.net/>

tinySpell is a small utility that sits in your system tray and monitors the text you type for spelling errors. tinySpell does two things: monitors your keystrokes, and checks the clipboard for cut or copied text with misspelled words. When it detects misspelled words, it will emit a beep, and the tray icon changes from white to yellow. You then have the option of correcting the spelling using the list of options that pops up on right-clicking the tray icon or on pressing the hotkey.

This tool is especially useful when you are working with applications like text editors (Notepad etc.) that do not have spell-checkers. The one irritant could be the beeps when you are busy typing. You can optionally disable this, but if you want to keep your text free of spelling errors, the warning sound may be helpful.



PrimoPDF—No hassle PDF printing

Alternatively, you can copy the entire text after you finish typing and use *tinySpell* to check for all the errors.

WordWeb 4.5a

<http://wordweb.info/free/>

WordWeb is a free dictionary and thesaurus that runs in the background, sitting in the System Tray. Any time you come across a word whose meaning, spelling, or alternative you want to look up, just select the word and press [Ctrl] + [Alt] + [W], the hotkey used to invoke WordWeb.

If the word you selected is not in the dictionary, it will offer you alternatives as possible words and display a list of words closest in meaning. If you are not satisfied with the results, you can click on the X-Ref button on the upper right and chose to either access a dictionary on the Web or search the Web for relevant information on the word.

For words found in the WordWeb dictionary, it displays the meaning and displays tabs with related words of different types: the Synonyms tab shows words which mean the same in context; the Antonyms tabs shows opposites; the See Also tab shows other word forms for the same word (example: “jump up”—See Also tab: “jump on”) and so on. The number of tabs that appear will depend on the available information for the word being queried.

The meanings box also lists the available grammatical forms of the word: Nouns, Verbs, Adverbs, Adjectives, and you can click the buttons on the side of the box to quickly jump to any of them. WordWeb can become quite addictive. Since it is not limited to working with any one application, you may eventually tend to rely



WordWeb—One click dictionary

on it more than you would on the spell-checkers and other grammar-checking tools in your word processor!

OpenOffice.org 2.1

<http://openoffice.org>

In full-featured, free office suites, OpenOffice.org (Ooo) is one of our perennial favourites and needs no fresh introduction. The latest version is a maintenance release with some minor improvements. For newbies to the Ooo culture here's a quick recap.

This office suite consists of Writer for word processing, Calc for spreadsheeting functions, Impress to create presentations, Math for writing mathematical formulas, Draw for basic drawing, and Base to create ad hoc database applications.

The biggest attraction is that you get all these capabilities at the unbelievable price: Free. Comparing with the more heavyweight and popular rival Microsoft Office, there are some pluses and minuses. If you are looking at the Rs 15,000 plus price tag, then, of course, Ooo wins hands down. In terms of functionality, admittedly, there are differences in working. Things taken for granted in MS Office will need to be relearned. While many keyboard shortcuts are the same, as in [Ctrl] + [S] = Save, [Ctrl] + [V] = Paste, and so on, some shortcuts won't work—for example, [Ctrl] + [D] in Excel will fill down the contents of a cell; in Ooo this is a bit more cumbersome.

These minor inconveniences aside, you might find some of the features in Ooo more gratifying—like the inbuilt one-click PDF converter. It also recognizes MS Office documents (those with extensions like .doc, .xls, .ppt, etc.) and opens them, and can also save documents in those formats. For simple documents this shouldn't be a problem but for documents with complex formatting like Tables of Contents, bullets, tables, graphics, etc. there might be some loss of formatting when viewing it in Ooo for MS Office created documents and vice-versa for Ooo created documents.

Additionally, somewhat in the spirit of Firefox extensions,

OpenOffice supports user developed extensions. Find out more about the available extensions at <http://tinyurl.com/27sgj8>. You can also learn how to make your own extensions.

As an office suite, Ooo is more than sufficient for most needs. It is only the hegemony of MS Office in the marketplace that has created the inertia that prevents us from switching to it. It would seem that OpenOffice will find increased adoption as the Government tightens its grip on anti-piracy laws!

Virtual Iron

www.virtualiron.com/products/Free_Download.cfm

Virtualisation software allows you to run any operating system within another operating system. For example, Virtual Iron will allow you to run Windows XP on Red Hat Enterprise Linux (RHEL), and vice versa. This capability has many uses—software testers can set up different configurations of the same operating system on a single machine, your main operating system can be Red Hat and you can have a virtual Windows XP, complete with all the relevant Windows applications running inside RHEL. One advantage with this kind of configuration is that the entire virtualised operating system resides as a single file on the host operating system (RHEL in this case).

Suppose you want to switch your machine, all you need to do is copy the file to your new machine, and the entire configuration plus all the data will be exactly as it was on the old machine. No cumbersome reinstallation process.

Virtual Iron started life as a software that allowed a single operating system to use multiple servers. This might sound a bit confusing, but in contrast, VMWare and Microsoft's Virtual PC allow you to run many operating systems on a single server. Conceptually, Virtual Iron was virtualising the underlying hardware, while VMWare was virtualising the operating platform. Still confusing? Forget it!

This download is Virtual Iron's answer to VMWare and Microsoft, allowing you to run multiple operating systems on a single server or desktop operating system (Red Hat Enterprise, XP Professional (32-bit only), SuSe Enterprise, or Windows Server 2003 (32-bit only)). The attraction is that it's free for life! The catch? They hope they will convince you enough to upgrade to their Enterprise edition, which can scale to multiple servers.

The hardware requirements are steep—minimum 2 GB of RAM to start with, plus you need to have processor support in the form of Intel’s or AMD’s virtualisation assistance technology.

PowerPoint Viewer 2007

<http://tinyurl.com/u5bsa>

PowerPoint Viewer 2007 is a free application from Microsoft that lets you view PowerPoint files without requiring you to install PowerPoint.

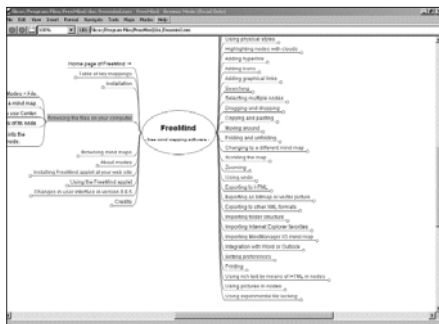
FreeMind

<http://freemind.sourceforge.net>

Free Mind is—depending on how you look at it—a mind-mapping or knowledge-mapping or concept-mapping tool. Just as KeyNote takes you to the next level from ATNotes, FreeMind is where you go when you feel you have outgrown KeyNote.

FreeMind expands on the concepts of nodes and sub-nodes briefly discussed on in KeyNote. The basic premise is that whatever you want to study, track, or record can be organised in an inter-linked hierarchy.

You can use FreeMind to keep track of projects and even



FreeMind—Map your mind

project-related files and documentation, Internet-related research, create a knowledge base, write essays and brainstorm, and even write out your philosophy!

It's pretty easy to get started right away with FreeMind. Give a title to your topic or task, right-click and create a sub-node, and go on to expand your ideas as they occur. You can later rearrange, delete and refine them as things become clearer. An exhaustive set of tools are available to visually as well as functionally mark your nodes for various things. For example, you may hyperlink a node to another file or Web site, add icons to represent specific states or ideas, or change the physical style of a particular section of the tree if you want to emphasise something.

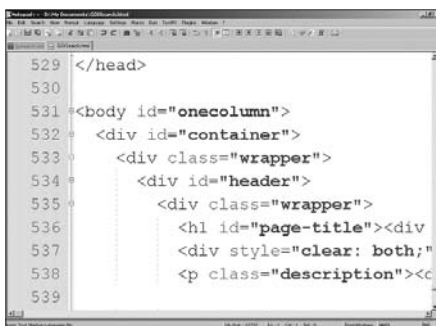
Finally, when you are ready to share your project with the world, just export it as a file—HTML, JavaScript-based HTML, PDF, and more.

Notepad++

<http://notepad-plus.sourceforge.net/>

Notepad++ is simply put, Notepad on steroids. While primarily targeted at the power software developer, Notepad++ is packed with every feature you might have ever wanted (or not even thought possible!) in a text editor. Things like multi-document view, where you can edit many documents at the same time, text zoom in and zoom out make Notepad++ a powerful replacement for the simple Notepad.

Software developers will love the support for syntax highlighting and the ability to add language-specific function lists. An amazing feature in a product like this is the macro recording and playback function. Click the record button, type in a string of text, click the stop button and save



Notepad++ Notepad on Steroids—Zoom in and much more

it as a macro with a hotkey combination. The next time you want to use the same text just hit the hotkey combination. This flexible product is a worthy replacement if you are looking for something with more flexibility and versatility than Notepad.

PortableApps Suite (Standard Edition) 1.0

<http://portableapps.com>

PortableApps Suite is a collection of software programs that you load onto your USB pen drive and take with you wherever you go. You no longer have to be crippled when you are away from your machine. Everything required for your browsing, productivity, and communication needs are located conveniently on the pen drive, with all the custom settings and preferences you configured.

The suite includes Firefox Portable for Web browsing, ClamWin for the anti-virus, Gaim for instant messaging (it can connect to all popular IM networks including Yahoo!, MSN, and Google Talk simultaneously), OpenOffice.org Portable, Thunderbird Portable for e-mail, Sunbird Portable for calendar and task management, and Sudoku Portable. In fact, this is just the standard package. There are other options on the site with which you can customise the applications you want to use.

All you require is a 512 MB pen drive to load the standard edition, and about 250 MB left over to store your documents and other files. Naturally, having more space on your pen drive is always better.

Fun Stuff



This section is devoted to fun, crazy (harmless crazy!) and leisure time freeware. When you are up to here and fed up with work, pick out any one and have fun.

StumbleUpon

www.stumbleupon.com

StumbleUpon is the ultimate time-waster. Add “addictive” to that and don’t complain we didn’t warn you. Essentially, what StumbleUpon does is to take you to different, very interesting sites from all over the Web. If you use Internet Explorer or Firefox, you can install the

StumbleUpon toolbar. Click on the Stumble button and you are taken to a Web site based on the topics of interest you selected. At the moment, you can select from a maximum of 127 topics.



StumbleUpon—the recommendation engine

StumbleUpon is also a combination peer-to-peer and social networking site grouped around your interests. You can get in touch with fellow Stumblers, leave comments about sites you loved or hated, Stumble only within a specific topic (by choosing it from the toolbar), vote for sites you like or dislike (buttons on the toolbar), and more. As StumbleUpon learns about your likes and dislikes it will further refine the sites it shows you.

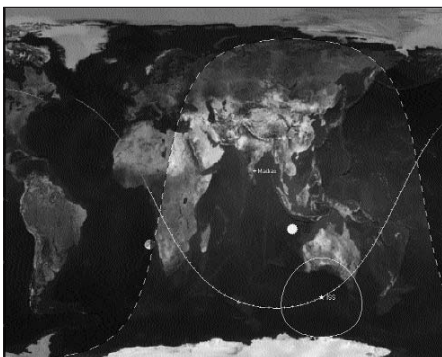
By clicking on the Pages button, you will be taken to your profile homepage where you can see your complete Stumble history, sites you rated as “I like them!”, tag clouds of the sites you visited, and more. You can even tell friends of interesting Stumbles you came across. You can also suggest sites you discover by not Stumbling—simply click the “I like them” button, and it will be submitted to the StumbleUpon database—and available to the members of your interest group.

The options and possibilities are, well, huge, so rather than boring you with more talk—go right ahead and Stumble!

Orbitron 6.0

www.stoff.pl

This one is a must for all you aspiring astronauts and sci-fi junkies. Did you know there are more than 8,000 satellites orbiting the earth? That since 1957 when the Russians shot up Sputnik—man’s first artificial satellite—more than 20,000 satellites have circled the earth at some point or the other? No? Well, so didn’t we! And that doesn’t stop us from going nuts over Orbitron.



Orbitron—Beam us up!

This is a free satellite tracking program that shows you the current position of any of the 8,000+ satellites in orbit, on a world map. The screenshot shows the current position of the ISS (International Space Station). The satellite telemetry data is updated almost daily, and you can update it directly over the Internet or manually download and update the program.

The program interface may be a bit confusing at first, and you will need to spend some time trying to figure out what’s what. That, we think, is more than half the fun! Click on the location tab and select your city from the drop-down on the right, or at the left, enter the name of your city and give its latitude and longitude. You can also right-click on a spot on the map and select the “Pick Location” option. There are quite a few other options—which we aren’t getting into because, like we said, half the fun is in finding out.

Finally: Orbitron is free but it’s not freeware. It’s cardware. The program author Sebastian Stoff requests, if you like the program, to send him a postcard! So, while you dream up satellite trajecto-

ries to track, let Mr Stoff know how much you are enjoying it. His address is

Sebastian Stoff
ul. Dziewulskiego 36a / 52
87-100 Torun
Poland

Guitar Chords Crash Course

www.bincsoft.com

Aspiring guitarists are going to enjoy Guitar Chords Crash Course, or G3C as its called. You get a simulated fret-board that will show you the finger placements. One nice feature is you can create a playlist of the guitar chords you are practising in the order in which you would play them. You can then just hit the play button and follow the sequence on the screen to ensure you're getting your fingers on the fret-board right. There are four sets of chord files to choose from—default to advanced—and you also get a metronome and a drum machine. The drum machine is particularly addictive: you can spend hours trying out the different combinations to get that exact beat hammering away inside your head.

Recipe Manager

www.nutritionanalyser.com

Ok, so you've worked your way through the entire line of MTR's ready-to-eat dinner packs, have worked your way through all the restaurants in town, and are now staring at your spreading middle in the mirror wishing you knew how to cook! Call your mom, get down all your favourite recipes, fire up Recipe Manager and enter it there. Conveniently, recipe manager allows you to define Cuisines (Indian, Chinese, Punjabi, etc.), and also let you define recipe types (breakfast, sandwich, snack, lunch, dinner etc.). So each recipe will belong to one Cuisine and as many recipe types as you like.

You can also define the preparation time and the cooking time—very useful if you want to narrow your search to something that takes less than x minutes to prepare, define the

number of servings, specify the ingredients, the cooking procedure, and also add nutritional facts and where you got the recipe from. The nutritional information will be especially useful if you are on a diet and want to narrow your recipe choices to stay within a particular nutritional value. All in all, the program is easy to use. What remains to be seen is if you will get around to using it—and for how long!

Go2Web20.net

<http://go2web20.net>

2006 was the year of Web 2.0. If you've heard about Web 2.0 and are wondering where all the 2.0 sites are, this is where you go. Go2web20.net is a compilation of a huge collection of Web 2.0 sites. And of course, the site itself is very Web two-ish. The directory is laid out visually, with each site's logo in a small rectangle. Hover over any rectangle and you get a tool-tip-like pop-up that will show you further info about the site. Click on a site and more information is displayed in a bottom pane that slides open. You can then



Go2Web2.0—One Stop Web2

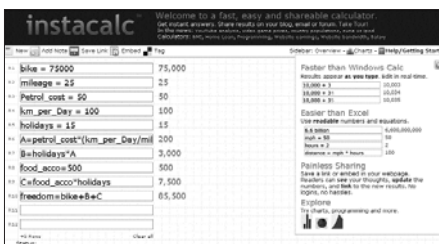
choose to visit the site or move on to the next one. Very cool.

Instacalc

<http://instacalc.com>

This online calculator follows the Web 2.0 tradition and gives you results as you type. You aren't just restricted to numbers; you can use words to represent numbers. Example, if you define distance = 100, per_day = 10 and type "travel = distance / per_day", you will get the answer 10. You can create graphs, embed the results in your blog, and tag it using del.icio.us. You can also do things like type "5 billion * 6", and you will get the answer in numbers—all instantly,

without any delay or waiting to click a button. And as is to be expected with Web 2.0 sites, there is a whole range of new functionality in beta (<http://instacalc.com/beta>) with which you can extend your calculation frenzy beyond numbers and start playing around with units.

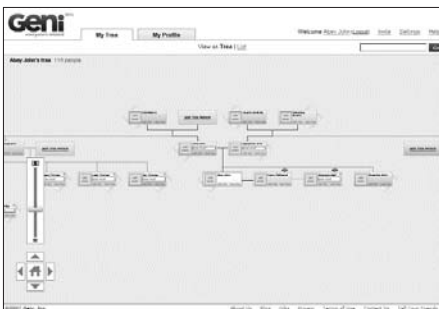


Instacalc—Calculate anything!

Geni

<http://geni.com>

Geni's premise is very simple. We are all related. This idea, while theoretically feasible, has resulted in a family tree Web site where you map your family tree visually. If you've tried to create a family tree earlier—either on a Web site or on paper or in MS Word or on Excel or on anything—you will have realised how painfully difficult and error-prone it is. Geni hits that exact problem on the head, and all you need to do is follow the visual clues to create your own family tree. What's more, you can invite all your relatives via e-mail to join the tree. And your relatives can in turn invite their relatives to join the tree—and pretty soon you realise that your family is way bigger than you thought it possible. The data entry can be kept to a minimum—name, e-mail address, and relationship to another person in your tree—if you feel that is the way to go, or you can fill in as much detail as you wish. You can add your picture (so far-flung relatives will finally know what you look like).



Geni—Get to know your family

vNES

<http://vnes.thatsanderskid.com>

Anyone remember those old 8-bit Nintendo games? If you are in your twenties that's doubtful. Still, this Web site has a collection of over 400 classic Nintendo games, which run in a Java-based emulator. While all the games are played online, you will need at least 192 MB of RAM



vNES—Relive your memories

and a Pentium 3 to play the games at this site. New games are being added almost every day, and you can have loads of fun. Just remember to turn down the volume if you are in a public place!

Throw Paper!

www.widro.com/throwpaper.html

How good is your aim? Can you throw a piece of paper into a basket in a strong wind? This thoroughly addictive game has only one objective: get the piece of paper into the basket against a head wind at varying speeds and direction (left or right only, thankfully!). Very simple to play—click on the piece of paper and wait for the oscillating arrow to reach the direction in which you want it to get released. Based on the wind speed, the paper will curve through the air, and depending on the direction of your release will either fall in the basket or outside. Think it's easy? Just try it out. If you can score 10 you are a pro. Reach 20 and consider yourself a guru.



Throw Paper!—Not as easy as it looks

ImageChef

www.imagechef.com

Using ImageChef is simple. Select an image from the gallery, enter your custom text, and download the image. The image collection is not very large, but this can be used for fun when you want to augment your blog post with a wacky image. You can also optionally register at the site for free. This will allow you to save your images

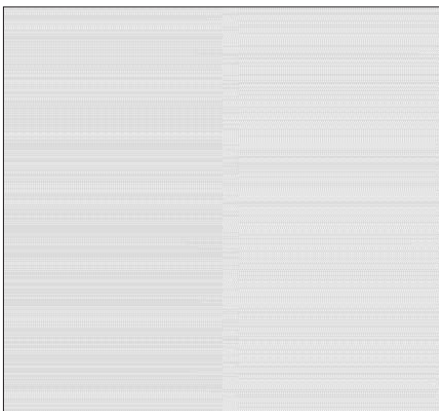


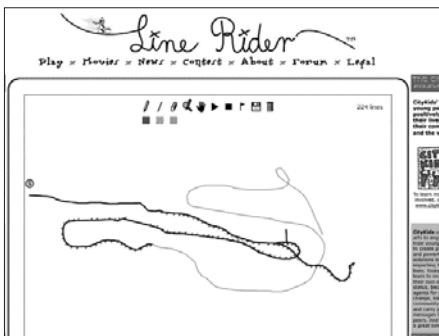
Image Chef—Push button custom images

with tools to upload the images to most popular blogging services. In addition, you can also use it to send e-mail greetings to friends.

Line Rider Beta 2

www.official-linerider.com/play.html

Line Rider is a drawing tool you use to draw lines for a rider to ride on. According to the author, this tool is a toy and not a game. It was created for teaching illustration, but it has become a world-wide hit, and thousands of people are addicted to playing with it. In this version of the game, you can draw your own tracks along which the rider will ride. The trick is to draw tracks that will keep the rider on it as long as possible. Before you know it you would



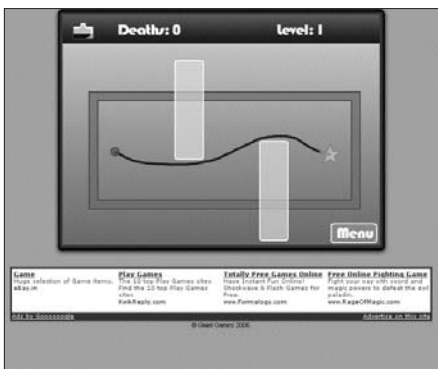
Line Rider—How long can u keep the rider riding

have spend a few hours trying to get the rider to stay on for those extra three seconds!

Paths

www.glaielgames.com

The first hurdle is figuring out how to play the game. This should take you no more than ten minutes. The second hurdle is tearing yourself away from it! Paths is a very simple game. There is a ball. There is a star. You have a bottle of ink to draw a line between them. Click the spacebar, and the ball will roll along the line to the star. There is a set of obstacles which get in the way. The kicker is how you manage to shepherd your ball through these obstacles.

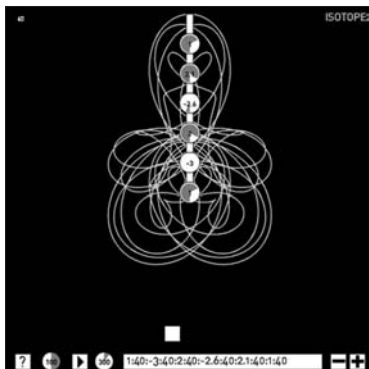


Paths—Keep your ball alive

isotope2

www.grapefrukt.com/blog/isotope2

Isotope defies definition. Is it a game? A simulation? A toy? What is it? We've racked our brains long and hard and haven't found an adequate answer. Why don't you check it out for yourself and decide?

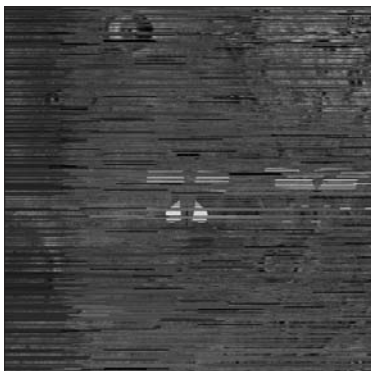


Isotope2—what is it?

Goggles

www.isoma.net/games/goggles.html

Want to do a spot of flying over New York or London? How about the moon or Mars? Hop over to Goggles, a flight simulator that uses images from Google's mapping service. Select your location and click Start. A small plane will fly over the actual terrain of the location you selected. Use the arrow keys to manoeuvre around and the spacebar to fire bullets! What's more you can extend the simulation to



Goggles—Fly over the moon

fly over your hometown. The full instructions are available at <http://tinyurl.com/h9m9a>. Finally, when you get tired of flying around, just hold the Up Arrow key and watch your plane explode on the ground!

Synaptics Touchpad Games (for laptop users)

www.synaptics.com/support/utliti.cfm

Use a laptop with a Synaptics touchpad? Get these utilities and have fun. The Drum Pad will simulate a drum machine, use Sketch to draw or write using the touchpad, use Thermin to get musical accompaniment for your fingers when they use the touchpad, and test your memory with the TouchPad Says game—a spin on the classic Simon Says game.

Finger Frenzy

<http://www.offthewrist.com/index.jsp?id=ff>

Just how fast are you at typing? How long will you take to type out all the letters of the alphabet? This is what Finger Frenzy tests. Just click on Play and start typing A to Z as fast as you can. There's a high scores table where you can submit your name, but that's largely meaningless, as the top 15 slots have been taken over by

people who have used automated scripts to take the top positions. But since we are not in it for the fame, we can go right ahead and just try to beat our own score.

42 Games

<http://tinyurl.com/3axrlb>

The answer is 42. But the ques-

tion is: “Do you know the question?” One hint is that 42 is the answer to Life, the Universe and Everything. But the actual question was lost in the final seconds at the end of a million year experiment when the earth was destroyed by a Vogon constructor fleet building a hyperspace highway.

If none of the above made any sense, don’t worry—you need to read *The Hitchhiker’s Guide to the Galaxy* for it to sink in. You also need to read the book if you want to play this game. *The Hitchhiker’s Guide* is one of those rare books that make perfect sense while being whacky. This game is built around the events in the book and comprises of 42 very, very short games. Pit yourselves against hitchhikers from around the galaxy.

Montage-a-Google

<http://tinyurl.com/44h1r>

This site creates a collage of images from Google image search based on the keywords you enter. The screenshot here is a collage for the keyword “India”.



Finger Frenzy—can you type fast enough?



42 Games—Of mice, cheese and space!



Montage-a-Google—Keyword based image collages

An Atlas of Cyberspaces

www.cybergeography.org/atlas/atlas.html

This site attempts to represent the Internet and emerging cyberspaces within the traditional framework of maps and graphical representations. These cybermaps are intended to help us visualise and understand the emerging digital landscape that extend beyond our monitor. Most of the graphical representations are of the traditional variety, but there are some which attempt to visually represent new concepts, data, and ideas. While nowhere near complete, this site will give you a bird's eye view of the Internet from many different perspectives, and give you food for thought about the way things are going to shape up in the future.

Vista Upgrade Prank

<http://tinyurl.com/yynu6zq>

Fool your friends into installing this application. It will pretend to run through Vista's Upgrade Advisor and then install Vista.

Actually it does nothing of the kind. At the end of the “installation” it will display an image of the Vista Desktop for some time before exiting with the message that it was a prank.



Vista Upgrade Prank—Fake Installation Screen

Suggested text to friends: “Hey xyz, guess what? You can actually upgrade to Vista for free on any computer, even a Pentium II. This is secret Microsoft software only known to a few insiders. Just run the attached file to install Vista! Tell everyone you know!”

Darwin Pond

www.ventrella.com/Darwin/darwin.html

Darwin Pond is an imaginary gene pool manipulation game that allows you to have both fun as well as conduct experiments if you’re so inclined. The game consists of a pond where creatures (known as swimmers) grow and mutate, somewhat replicating the cycle of evolution. You can choose your pond, set the number of swimmers in the pond, do things like modify a swimmer’s genes, clone a swimmer, and mutate a swimmer. At a more serious level, Darwin Pond tries to act as an Artificial Life Simulation game, but that doesn’t stop us from having fun with it just the same!

EQuake

<http://tinyurl.com/253b4f>

This little application makes the windows on your screen shake like there’s been an earthquake. You can set whether all windows should quake, the speed of quaking, and how wide the quake should be. Just hit the [Esc] key when you want to stop it.

Desktop Shooter

www.onefog.com/freeware/desktopshooter.shtml

Frustrated by e-mails from your boss or customer asking you to do the impossible? Whip out Desktop Shooter and rip it to shreds! How is that possible, you wonder? Try it out and find out. When you are through, just hit the [Esc] key—everything is back to normal.

Message Manager Lite

www.rjlsoftware.com/software/utility/message

Message Manager Lite can be used both as a fun program as well as for serious work on your network. Users who log in to the system can be presented with a customised message, including images and buttons that can be anything you choose. Give your friends a scare and more!

Solar Screen Saver

<http://sohowww.nascom.nasa.gov/freestuff>

This screensaver program will allow you to watch near real-time images of the sun courtesy of the European Space Agency's Solar and Heliospheric Observatory (SOHO). When the screensaver is activated, it will look for the latest images of the sun that SOHO has sent to scientists. Watch mind-boggling things like Coronal Mass Ejections explode out from the surface of the sun, and remember that the surface area of that explosion may well be bigger than our planet!

Desktop Grafittist

<http://tinyurl.com/2qmuf9>

Here's another frustration buster. Feel like vandalising your desktop? Fire up this simple spray-painting application and spray across your Desktop to your heart's content. Great for gags too. Load up the program on a friend's machine and leave a surprise message for him on his Desktop.

AutoInsult

www.coruscant.ltd.uk/Products

Stuck for some choice insults you want to hurl at your friend? How does "May a cult of homely administrators dribble pathetically in

your soapdish” sound? This application allows you to specify the level of offensiveness of your insult, and the type of insult—Arabian, Shakespearean, Mediterranean or Modern! You can even customise your insults to some extent. So, the next time you are left speechless by some moron, don’t be—just reach for AutoInsult!

David Pye’s Website

www.david-pye.com

We actually came to David Pye’s Web site to review one of his programs, but got so fascinated by all the other stuff on his site that we’ve decided to let you browse and pick. Some of the ones we really liked:

GoogleDavo—shows detailed road maps of most cities and countries using images from Google Earth; The Jokebook—a huge collection of jokes; GIF Vault, Web Graphic Animation Vault and Web Graphic Vault—thousands of GIF, animation and static images you can use for virtually any project. And there’s more, of course.

3D Solar System 3.9

www.tingan.com

This program simulates a 3D model of the solar system with all the eight planets and Pluto (which, if you haven’t heard, has been declassified as a planet!) With the True World’s option set to On, you can have some very realistic views of the planets. The camera can zoom into a moon or planet, and there are various options like “Light and Shadow on/off”, “Atmosphere On/Off”, “Rotation Speed”, and so on. You need to have at least a 1 GHz processor with 256 MB RAM and a 64 MB graphics card to use this application.

Desktop Enhancements



Themes, screensavers, Desktop backgrounds, icon packs, and other visual enhancements are all over the place on the Web. We shall not be covering these extensively here, focusing rather on applications that let you make most of your Desktop.

Before we begin with the freeware, we should mention Windows' Active Desktop feature. Windows allows dynamic online content to be displayed on the Desktop through the Active Desktop feature. With the spread of always-on broadband connec-

tions, this otherwise rarely-used feature can now be put to good use. Of course, using Active Desktop hides the wallpaper.

To use an Active Desktop, enable this in the Display Properties window (**Display properties > Desktop > Customize Desktop > Web**). One can load any Web site as the Desktop, and changes to the site are reflected on the Desktop. This feature is most useful for constantly-updated sites like news sites or stock market tracking sites.

10.1 Electronic Post-it Notes

With a PC in front of you, hunting for an elusive post-it note is unnecessary—when you want to quickly jot down something, use Notepad. But this application has two features that make it unsuitable for spontaneous note-taking—it doesn't save itself, and it cannot be “pinned.”

Electronic versions of 3M's legendary Post-it Notes fill a real convenience void. They are an able companion to anyone using a PC: they offer an easily-accessible storage space for data on your Desktop without having to bother saving it.

One of the golden oldies in this software category was TurboNote. This application is no longer free, and is offered as a 30-day trial or as sponsorware. Finding an earlier, free version of TurboNote would be a worthwhile endeavour.

Features common to electronic Post-it Notes are:

- They are usually resident in the System Tray, and can be launched in a jiffy, either by a hotkey or a single click.
- The notes can be placed anywhere on the screen, and remain rooted to the spot unless repositioned by the user. They make for little obstruction to the rest of the activities on the system, either by becoming transparent or by minimising automatically when not in use.
- The appearance is changeable—background colours, fonts, etc.

- Content is auto-saved at set intervals, which is probably the most important feature. Notes are stored and organised by the application and can be hidden from view without being deleted.

Some capable “Post-it” programs are At Notes, Stickies, PrestoNotes, Post It Software Notes Lite (from 3M), and FastNote. All these offer a different subset of the features offered by TurboNote. We’d recommended you do a test run of TurboNote to really appreciate how good it was when it was around!

10.2 Program Launchers

The quickest way to access data or programs on a PC is to save it—or a shortcut to it—on the desktop. This philosophy quickly renders the selection of Desktop background irrelevant: it leads to shortage of Desktop real estate. Enter the Program Launchers.

These applications offer more space without occupying any for themselves. All program launchers have the following features:

- They remain hidden or minimised until they are launched, which usually involves a click or a mouse movement.
- They allow easy transfer of icons from and to the desktop.

10.2.1 FSL Launcher

This application comes in two flavours, with the paid version allowing the user to set a “hotspot.” The free version has a pre-determined hotspot—the top left edge of the screen.

FSL offers to categorise the icons under different tabs titled “Programs”, “Games” etc, but that is



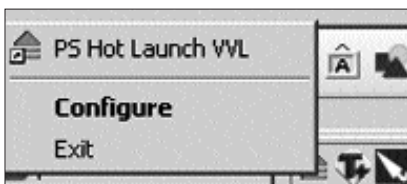
FSL Launcher takes the clutter away from your desktop

self-defeating, considering that users rarely arrange icons into separate groups on the desktop. But, users are free to overlook this feature. Drag and drop the icons you'd like to remove from the Desktop. Every time you need to launch a program, move the cursor to the top left edge, and FSL pops up with the shortcuts.

There are other capable program launchers that operate on similar lines.

10.2.2 PS Hot Launch

This application works out of the system tray and offers a Start-Menu-like pop-up for stocking icons. Menus pop-up with a mouse hover, and there is the ability to resort icons based on popularity.



PS Hot Launch sits quietly in your system tray

“Launch Tab” is a freeware similar to PS Hot Launch, except the location of the tab can be configured.

10.3 Virtual Desktops

If you multitask a lot and perpetually have a few dozen windows open, Virtual desktops can help you spread out and categorise the clutter. By opening programs in different Desktops, it becomes easier to work. While Linux distros have had this feature for a long time, Windows doesn't. Virtual Desktop (VD) applications bring this functionality to Windows.

10.3.1 VirtuaWin

This extremely customisable application takes time to learn. It can support up to nine VDs in a grid the dimensions of which can be set by the user. A 3 x 3 grid or a 9 x 1 grid will influence the layout of the VDs. Switching across VDs can be accomplished with a

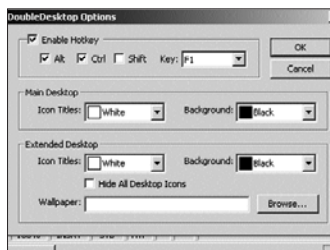
hotkey or a movement of the mouse. Moving the mouse to the left screen edge will take you to the previous VD available horizontally, while moving the mouse to the top edge will take you to the previous VD available vertically. VirtuaWin allows you to set sticky windows for all Desktops; for example, if you would rather have access to the Winamp window at all times, it can be made sticky so it will be present across all VDs. Besides that, a window from one VD can be “passed on” to the adjacent VD via a simple drag. The number of the Desktop you are working on is shown in the tray icon.



The VirtuaWin options dialog

10.3.2 Double Desktop

Those intimidated by the complexity of VirtuaWin can consider Double Desktop, which offers two Desktops that can be switched with a hotkey or a click of the mouse on the system tray icon. Windows can be passed on from one Desktop to the other.



DoubleDesktop's options

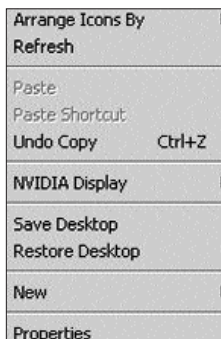
10.3.3 Virtual Desktop

This is a 10-VD supporting application that installs as a service, and hence is not visible after installation. There is no GUI, and no options to configure it. But it works. One can switch desktops by using the [Alt] + [X] combination, where X is the number of the desktop. It can't get simpler! Resources can't be shared across Desktops, though.

10.4 Miscellaneous Applications

10.4.1 Restore Desktop

If you have been using the same PC for about a month, it is normal to expect frequently-used shortcuts at certain places on the screen. Unfortunately, if in the meantime, you or someone else rearranges the icons, or if an application did it for you—like games which run at a different resolution and crash midway—it can be irritating to search for an icon.



Restore Desktop is a little application that offers to save icon positions and restore them if the positions are changed. Once the desktop icons are arranged to your satisfaction, you just right-click on the Desktop and choose Save Desktop. Now anytime you find the icons in disarray, right-click and choose Restore Desktop.

10.4.2 Bionix Wallpaper

This is a wallpaper management application. It uses a media-player-like interface, with a playlist containing the wallpaper files that will be displayed, and settings to control whether the images will be displayed sequentially or shuffled. The change interval and other parameters like the position of the image file can be set. It also bundles a screensaver and the interface can be skinned.



Bionix Wallpaper looks more like a media player

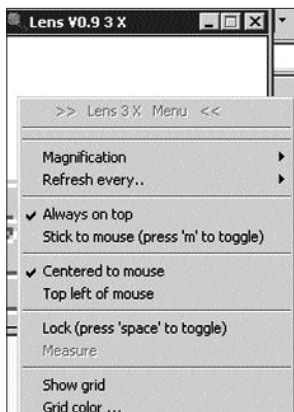
10.4.3 ClocX

A simple utility that shows a clock on the desktop. The shape and colour of the dial can be changed and can be made transparent, and it allows click-through, so it is never a hindrance. Alarms can be set.

10.4.4 Lens

Windows bundles a capable magnifier tool. This is accessible in the Start Menu under **All Programs > Accessories > Accessibility**.

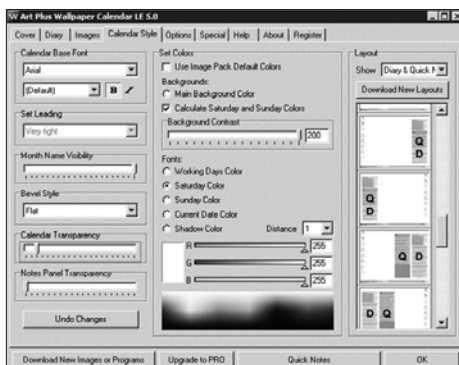
The area below the lens is magnified, and the user can set the level of magnification. The extras offered by Lens are: the window containing the magnified result can be made to stay in one place or move with the mouse, and the magnified result can be made stationary even when the mouse is moved.



Lens is far better than Windows Magnifier

10.4.5 Wallpaper Calendar LE

This application lets the user display a calendar on the desktop. While the paid, Pro version allows the wallpaper to co-exist with the calendar, this is not possible with the Lite version. It only bundles three wallpapers, with the provision to change it at user-set intervals.



Overlay a calendar on your wallpaper

Besides offering many options—number of months to be shown, calendar size, location, colour code, transparency, and more, it also bundles a Diary and Quick Note. The contents of the diary and quick note can be displayed alongside the calendar.

10.4.6 Free Desktop Clock

This is a misnomer—it’s “Free System Tray Clock,” actually. It offers much greater information than the default windows



The clock on steroids

clock, by adding seconds, day and date—and about 50 ways to display all that in. It also offers to synchronise the system clock with an atomic clock from a selection of sites, including time.nist.gov.

Free Entertainment Online



The Net offers the most cost-effective distribution channel for digital content. Online entertainment can be of two categories—the downloadable kind and the streaming kind. The downloadable variety usually is of a higher quality than the streaming kind, since the optimisation that takes place to make data streamable invariably degrades it.

11.1 Tools of the Trade

As a customer of online entertainment, nothing is more important than having a broadband connection. Without this you will be unable to truly appreciate this form of entertainment—there will be significant delays in streamed data, and downloading will take time.

Then come media players that can play the popular media formats used for online media distribution. To enjoy streaming media, the relevant applications are Windows Media Player, Real Player, Quick Time Player/iTunes, and Winamp. More recently, the Flash Video (FLV) format has become a popular medium for streaming data, and for this you only need a browser with the Flash plugin. Downloaded FLV content can be played on a suitable FLV player, such as FLV Player and Riva FLV Encoder.

Downloadable content uses codecs to compress and thus get smaller, so you would need to install codecs to be able to watch it. Codecs not supported by the above-mentioned media players and are popular are DivX and XVID. The necessary codecs can be downloaded individually, or an all-in-one codec pack like K-Lite can be installed.

Browser-wise, it is best to use either IE or Firefox, and since file sizes can be massive, it is recommended to use a download manager. Depending on the integration between the different media players and browsers, the experience for the streaming content audience can vary. Usually links open the corresponding player and start streaming content, but sometimes, one finds that just a small file gets downloaded. The downloaded file contains the URL to the content. In such cases, if the corresponding media player is installed, double-clicking on the file should start the stream; if it doesn't, manually launch the media player and use **File > Open** to start streaming the just-downloaded file.

Some content is distributed using the BitTorrent protocol, in which case a BitTorrent client such as utorrent (utorrent.com) will be needed to download it.

11.2 Copyright And Piracy

Copyright is the authority given to an artist over the commercial exploitation of his art. Usually this is for a fixed duration, after which the content enters the Public Domain where it is free and can be used by anyone.

Copyright violation, or piracy, is a major issue for online media distribution. Briefly, it is illegal to download copyrighted content without the proper permission. With the spread of peer-to-peer networks that operate without a central server, it has become easier to distribute and access content that one has no copyright over. While it is easy to come across such content, the user needs to be aware of the consequences of such action. Similar to theft, copyright violation is a punishable offence.

11.3 Content Sites

Sites offering streaming content are easier to find than sites offering downloads. The reason for this is obvious once you view a stream: ads. Many sites offer free downloads of English songs and videos that are in the public domain. It is hard to come across legitimate sites offering similar Indian content.

Streaming content also comes in the form of radio stations and TV channels. Online TV stations can be accessed by using applications like TV.exe (tvexe.com), which is based on WMP and comes preloaded with a selection of TV channels. Alternatively, they can be accessed just like other streaming content, by using media players. Sites like WWiTV.com list links to IPTV channels from all over the world. Selecting a link launches the associated media player, and you can watch the channel. Similarly, Internet radio stations are also accessible through the many sites that index such stations. A few sites that offer free content are mentioned next. This is not an exhaustive list.

<http://emol.org>

EMOL, or Entertainment Magazine On-Line, offers downloadable movies. All these movies are old classics presently in the Public Domain, and include movies of Charlie Chaplin and The Three Stooges. Movies are categorised into genres such as Comedy, Adventure, etc. and can be searched. Movies can be downloaded or can be viewed as a stream.



Enjoy EMOL's classic collection

www.publicdomaintorrents.com

This site offers torrents of free movies and songs. The collection of torrents is categorised for easier access. Users can rate and review each title, but that requires a sign-up. Downloadable movies are compressed in the DivX format. If you do not have a torrent client, the site also offers an Easy Download mode, where clicking on the link downloads and installs a BitTorrent client—Blog Torrent—that can download the file. Streaming movies are also offered, but this relies on video.google.com.



Browse PublicDomainTorrents' huge collection

archive.org

Archive.org is dedicated to sharing historical information with the general public, and to that end offers various videos for download or for watching as stream. The content available at archive.org are either in the Public Domain, or are released under the Creative Commons license, which makes any creation free for perpetuity.

Users can check the available titles from the link “Moving Images” on the top banner. Video files are classified into different types like Movies, Cartoons, etc. The files are optimised for 64 Kbps and 256 Kbps connections, and downloads can be in the

VCD or DVD format. Movies form just a part of the video files on download here. One can also download US WWII propaganda video files here, among other things. The pages are extremely heavy (as much as 15 MB!) thanks to sloppy image compression, so if you’re on a limited data connection, remember to turn images off!



An archive of nearly the entire Web!

<http://www.cinemanow.com>

CinemaNow offers streaming, full, free English movies (with ads alongside), but don’t expect any of the blockbusters. Free movies are accessible under the “Free” tab on the site. Movies are categorised and can be searched. Each movie has a synopsis and user reviews can be added.



CinemaNow is like your own Video On Demand service

Users have two streaming options—to accommodate a 300 Kbps or a 700 Kbps connection. CinemaNow will entertain IE6 (or higher) users only and Windows Media Player needs to be updated to accommodate DRM functions.

<http://www.movieflix.com>

This site offers free and paid streaming movies, optimised for narrowband as well as broadband connections. Though they have an extensive library of movies on offer, the number of free ones seems

limited, and there is no easy way to get to them. Movies labelled as “Plus” are available to subscribers of the paid service only. Films are categorised, but since there is no Free and Plus category, a user has to browse through entire lists to find the free ones. Each movie has a brief synopsis. A link on the left sidebar allows the “Family Filter” to be switched on, thus preventing inappropriate titles and visuals from being displayed.



Use MovieFlix if your broadband isn't as broad as it should be

artistdirect.com

Visitors to this site have access to streaming content related to songs, music videos, movie trailers, and two video channels. The content is easily accessible from the corresponding link at the top row of the site. Music and music videos are categorised by genre. A search box also allows searching for content across all categories.



ArtistDirect—everything music

www.gigatracks.com

This site offers a platform for upcoming artists. Every artist is offered Web space to upload their songs and describe themselves. Songs are categorised into genres, and can be searched. The site allows songs to be downloaded, and also offers a stream for online listening. A review accompanies every band listing.



Got a band? Go GigaTracks!

There are many sites that offer similar support to upcoming artists, and offer streaming audio. Some of them:

soundclick.com: Well-organised catalogue of songs, allows lo-fi and hi-fi audio streams to cater to low-bandwidth and high-bandwidth connections respectively.

www.unsignedbandweb.com: As the name suggests, this site offers new artists' works in streaming format, across all genres.

www.shoutcast.com: This is an effort from Nullsoft, the makers of the popular Winamp media player. The site offers links to a lot of radio stations that can be heard on Winamp. On clicking the "Tune in" link, the browser downloads a .pls file that can be opened with Winamp. A few have reported problems with their firewalls not allowing Winamp to stream.

www.peoplesound.com (Note the "www."): This site offers songs of new artists and well as popular ones. The songs are in streaming and downloadable formats. The free songs can be accessed through the "Free Downloads" tab on the front page, but to download, you need to sign up. The songs are well-organised into genres. One interesting feature of this site is the ability to create a playlist containing the user's preferred songs (sign-up required before this feature can be used). A user can also browse through other users' playlists and play the songs in them.

www.mp3.com: MP3.com offers free downloadable songs of new artists, besides streaming audio and music videos. The free content is available under the Free Music link at the top of the page. The songs are further classified into genres under that link. Some songs are available as a stream only, while the rest are available in both formats. The Play button refers to the streaming content, while the "mp3" takes you to the file download. A short description of the artists, and statistics regarding the number of users who have viewed or downloaded the song are displayed alongside. Users can also add a review about the artist. Besides songs,

MP3.com also offers the artist's photos and blog. Streaming music videos are also displayed, and can be accessed through the Videos link at the top row.

Sites like YouTube.com and video.google.com also offer streaming content. Being community sites where anyone can upload videos, these sites are unlike the others discussed thus far. The fare on offer ranges from clips of everyday events like family parties, to coverage of newsworthy events shot by amateurs with mobile cameras.



The brand new MP3.com

A site offering a lot of information about legally getting music is www.goingware.com/tips/legal-downloads.html. Definitely worth a visit.

Some Indian sites:

Dishant.com: This site offers streaming audio in a lot of categories—Bollywood and regional. Under the Bollywood category, the songs are further classified into genres like Ghazals, Devotional, Wedding Songs, etc. and also by Movie Name and Actor/Actress name, making it easier to find the song you're interested in. A search box is also provided for this purpose. The Regional Language Songs are classified according to Movie Name only.

Registered users can maintain a playlist (called a "PCD" by the site) of their favourite songs so that they can be easily accessed. Lyrics of a few songs are also available. Additionally, the site also offers photo galleries and ringtones (polyphonic and

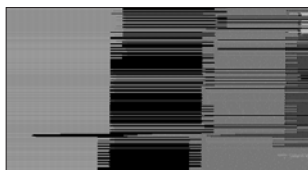


Get your ghazal dose and much more at Dishant.com

monophonic) for download on the site. A Radio section offers nine channels dedicated to different song types like “Love Songs,” “Wedding Songs,” etc.

http://radio.musicindiaonline.com: Offers streaming audio in many regional languages. Radio channels are also categorised according to other criteria, like year, actor, music director, etc. On launching the player, the site conducts a test to verify if the system has the relevant software and can access the stream. Unless the system passes these tests, the user will not be able to listen to the audio.

www.raaga.com: Visitors can access streaming songs in Hindi, Tamil, Telugu, and Malayalam at this site. Songs are categorised by movie title, actor name, music director, singer, etc. Registered users can store a playlist containing their favourite songs for easy access. Under each Language tab, there is a “Non-stop Channels” link which takes you to a listing of the various categories.



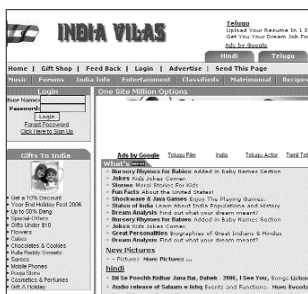
Choose your language!

http://www.allindiansite.com: Belying its name, this site only offers streaming audio in Hindi, Tamil, Telugu, Kannada and Malayalam. The songs are accessible from the Music tab at the top row. Songs are primarily categorised under film name. Each of the language categories is sub-divided into other categories based on the popularity of the artist—for example, the Hindi song category is also grouped under leading playback singers. Besides songs, the site also offers radio channels in each of the above languages.



All Indian!

www.indiavilas.com: This is more than an entertainment site, and songs and movies form a small part of the site's fare. It offers similar language content as **allindiasite.com**. Besides songs, **indiavilas.com** also offers movie trailers. The language selection has to be made from the top row of the site, and within each language page, the sidebar offers additional options.



Get your trailers at India Vilas

Songs are categorised by criteria like actor, director, year, etc. Songs can also be searched. Registered users can create a jukebox containing their favourite songs. Movie trailers can also be accessed through the sidebar menu. Some sections of the site work only with IE.

www.galatta.com: Galatta offers songs and movie trailers of the same set of languages offered by **allindiasite.com**. To access songs, use the Music link on the left sidebar. Songs are categorised by movie title only. Registered users can track their favourite songs for easy access. The link to view movie trailers also is on the left sidebar. Trailers are sorted on release date.



More regional content on Galatta

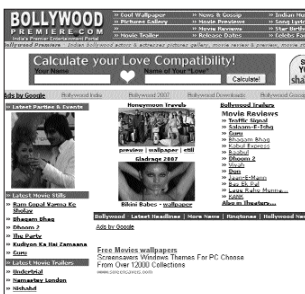
Many sites based on the film industry stream trailers of upcoming movies. A few of these sites:

www.bollywoodpremiere.com: Offers film trailers and songs, along with many other entertainment-related content like movie reviews/previews, actor interviews, etc. Also offers image galleries, ringtones, song lyrics, and more. The link to access the movie trail-

ers and music is on the top banner. Only four links to the movie trailers are displayed per page, which makes browsing to the preferred movie difficult, especially in the absence of a search box. The movies are also sorted in descending order by release date. Songs are available in a few regional languages like Bengali and Marathi, and genres, like Ghazals, North Indian Classical, etc.

www.nowrunning.com: Offers the usual combination of trailers, galleries, reviews, etc. of Hindi and South Indian language movies. Trailers can be accessed from the link on the top row of the site. Additional information in the form of actor list and synopsis is available on every movie page.

www.smashits.com: Offers streaming audio in a lot of regional languages and styles—classical, Carnatic, etc., besides movie-related fare. Smashits Radio, accessible from the link on the front page, offers several radio channels. Hindi songs are categorised based on year of release, actor, singer, etc. while the other languages have just a single channel. Clicking on any channel link opens a window that first conducts a test to verify the readiness of the system to receive the stream. Only if the tests are passed does the streaming begin. There is an ample selection to be made in the Hindi section.



Get your Bollywood dose



Get the low down on the latest movies at NowRunning



Get live radio at SmasHits

Besides the Radio Service, **smashits.com** also offers movie trailers and a Smashits TV service which is accessible from the main site. Clicking on the Smashits TV link at the top right will launch the video window, and the programs can be watched. Other video content includes clips of Bengali, Tamil, and Telugu movie songs and scenes, and Hindi movie trailers. All these can be accessed through the Video Link at the top row of the site. Videos are categorised by movie title only. WebDVD is a feature that allows the saving of a registered user's favourite movie or songs for easier access.